

ECONOMIC AND POLITICAL  
WEEKLY

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**ECONOMIC  
AND  
POLITICAL**

**WEEKLY**

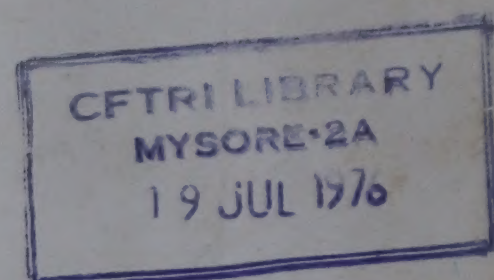
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Vol XI No 27

July 3, 1976

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**THE ECONOMIC SITUATION**

**OUT OF THE CLINICS AND INTO THE FIELDS**

**JUTE INDUSTRY'S PRESSURE TACTICS**

**COST OF RURAL CREDIT**

**LAW AND THE POOR: THE PARADOX**

**SMALL SAVINGS TO ESCAPE TAXATION**



# This disclosure is voluntary



**BHEL proudly discloses the highlights of its performance during 1975-76: a contribution of 1389 MW to the nation's installed power generation capacity; a production of equipment capable of generating 3215 MW of power; a turnover of Rs 418 crores and profit—after taxes—of Rs 22 crores!**

## Placing performance before profits.

In 1975-76, as in the previous years, BHEL outperformed itself. Turnover went up to Rs 418 crores—an increase of 34% over 1974-75. Out of the 1809 MW added to the nation's installed power generation capacity, BHEL alone contributed 1389 MW—over 75%! Nearly 30 crores of rupees were invested, making for even greater performances in the future.

And, above all, BHEL absorbed increases in costs without increasing customer

prices. Placing the emphasis on service to the nation rather than on profits—in keeping with the Prime Minister's 20-point programme for economic prosperity.

## Growth: a process that starts within.

1975-76 has again been a year of all-round growth for BHEL. Three new collaborations were entered into—one with a Swiss firm and two with West German firms.

Indigenisation efforts were intensified with the birth of Seamless Steel Tube Project which follows the Transform and Foundry Forge plants. The philosophy of power to the people gained a new impetus with the formation of the Exports Division. The creation of a separate Marketing & Sales Division reiterated BHEL's dedication to better customer service. The formation of the Oil Rigs Division, which will engineer and coordinate the manufacture of on-shore oil well drilling rigs, gave a new

depth to BHEL's concept of a total service for energy. And thus BHEL goes on...stopping at nothing to keep the wheels of progress going; growing to help the nation grow!

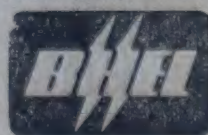
## A new world of power.

BHEL's present installed capacity to produce equipment capable of generating 3800 MW per year, places it among the top five manufacturers of its kind in the world. And, in terms of the spectrum of products offered, it's right on top!

Today, BHEL represents an investment of nearly Rs 300 crores and employs about 52,000 people. People who proudly disclose their intention to make the future as bright as the past has been.

## Bharat Heavy Electricals Ltd.

18-20 Kasturba Gandhi Marg,  
New Delhi-110 001



**Power  
to the  
people**

SAA/BHEL/2128



# ECONOMIC AND POLITICAL

# WEEKLY

Founder-Editor: Sachin Chaudhuri

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July 3, 1976

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## ECONOMIC AND POLITICAL WEEKLY

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# Unequal Partners

ONE of the major achievements claimed for the last 12 months is the alleged improvement in industrial relations, as reflected in a sharp drop in mandays lost as a result of industrial disputes. Statistics have been recently released by the government to show that mandays lost due to industrial disputes dropped by as much as 74 per cent in the second half of 1975 as compared to the first half of the year — from 17.10 million to 4.46 million. The improvement has been apparently maintained in the current year. The number of mandays lost in the first four months of 1976 is said to be 2.34 million which, it is claimed, shows a fall of 83.33 per cent over the figure for the first four months of 1975. The official press release on the subject also claims that during the past year there have been no strikes in the railways, ports and docks, defence and other Central government undertakings.

These claims notwithstanding, there are aspects of the industrial relations situation which should give the government cause for concern. There is no doubt that, whatever the reasons for it, there has been a sharp drop in strikes by workers and mandays lost as a result. By contrast, employers appear to be able to continue to resort to lock-outs with far less restraint. As a result, in many of the states the bulk of mandays lost is now accounted for by lock-outs. According to statistics compiled by the Labour Bureau in Simla, 3.75 million mandays were lost in West Bengal due to industrial disputes between July 1975 and the middle of May 1976. Of these, 1.9 million mandays were lost on account of lock-outs and another 0.8 million mandays because of lock-outs following strikes. The two together account for 83 per cent of the total mandays lost, straightforward lock-outs accounting for 58 per cent. By contrast, strikes by workers resulted in the loss of only 0.5 million mandays or 17 per cent of the total. It is the same story in UP. The total number of mandays lost in UP was 1.28 million, of which as many as 87 per cent were lost on account of lock-outs.

The industrial relations picture will remain substantially incomplete unless account is taken also of lay-off and retrenchment of workers. Sometime back the Minister for Labour had disclosed in reply to a question in the Rajya Sabha that as many as 4.8 lakh workers had been laid off between the third week of June 1975 and the end of that year. The government's latest press release on the subject of industrial disputes and mandays lost as a result does not update these statistics of lay-offs and retrenchments. It does, however, admit that "there has been an increase in retrenchment and the number of lay-offs and closures, especially in the textile, cement, sugar, engineering and jute industries" (emphasis added). The press note further admits that trade unions have repeatedly complained that lay-offs, closures and retrenchment had become "serious impediments in the way of the workers giving their wholehearted co-operation in the national effort to increase production". In the jute industry alone total and partial closures have rendered 50,000 workers idle, according to the West Bengal Labour Minister.

The combined evidence of increase in retrenchment, lay-offs and closures and liberal resort to lock-outs does raise the question whether the restraints imposed on normal trade union activity are not being exploited by employers. The Industrial Disputes Act was amended earlier this year to require employers in factories, mines and plantations employing 300 or more workmen to obtain the prior approval of the specified authority of the appropriate government before they laid-off or retrenched workers or closed down their establishments. Employers had also to apply within 15 days of the Act coming into force for regularising any lay-offs which might be continuing and seek permission to retrench workmen or close down establishments where the periods of the notice of retrenchment or closure already set had not expired. The Industrial Disputes (Amendment) Act 1976 came into force four months ago, on March 5 to be exact; however, judging by the official admission of an increase in retrenchment and lay-offs and closures, its impact appears to have been minimal so far. According to the government's press release on industrial relations, the union territories had adopted the Central rules and provisions of the Act and these rules had come into force in these areas. As for the states, 11 among them had progressed so far as to form specified authorities to draft rules, though there is no indication of when the drafting would be completed and the rules enforced. As for the remaining states — including, significantly, West Bengal — no information is apparently available on the progress, if any, made in implementing the Act.



## Jute Industry

### Pressure Tactics

THE jute industry is once again aiming all its guns at the government to secure as many concessions as it can. The industry has cried 'wolf' so many times in the past that one would have expected that the government would have by this time learnt to take it all with a grain of salt.

One of the major problems of the industry, we are told, is that the export demand for a number of products is weakening. Both carpet backing and hessian, the two major export items, are losing their markets because of high prices and competition from synthetics. The government last year allowed 10 per cent cash assistance on carpet backing exports and now has extended the same facility to hessian. However, the order books show that in carpet backing at least the situation is not as dismal as it is made out to be by the industry.

On hessian, the industry is now taking a holier-than-thou stance. It points out that the price of Rs 110 per 100 yards as now fixed will allow a section of the traders to buy the item at the prevailing price which is lower than Rs 110, register it at the stipulated price and absorb the margin. As if the industry does not know who these people are, it has now moved to fix the registration price at the notified level!

But the industry's main thrust is the argument that it is now facing extreme shortage of raw jute. It claims that, in keeping with the national spirit, it had maintained jute goods production at a very high level during the year ended March 1976 and now it finds itself left in the lurch. The 1975-76 production of about 1.3 million tonnes is the highest for about a decade. Spokesmen of the industry allege that mills have totally exhausted their raw jute stocks and are now forced to buy the fibre from the market where stocks have been cornered by a section of the trade. But how is it that some of the traders can still manage to hoard stocks of raw jute and sell them at black market prices when there is supposed to be a nationwide drive against such offences?

The industry, so runs its argument, today finds itself in a position when it cannot even get adequate credit from the banks as their godowns are empty and they can hardly provide any collaterals. This has forced them to make

distress sale which has further eroded their finances, compelling some of the mills to suspend operation. The industry's spokesmen threaten that unless the situation improves in the next few weeks, a few more mills would join the sick list.

With production not rising above 5.5 million bales during the current jute year (July-June) and the previous one, a raw jute shortage was not really unexpected. But the question is what has the industry done to forestall such a situation? Last year we saw a rather strange phenomenon when the fibre price did not rise even when the crop was a lean one. Normally, there is a cycle: one year there is poor crop and high prices; the following year a larger crop and lower prices; and in the third year it is again smaller crop and higher prices, and so on. But somehow in the jute year 1974-75, this pattern did not work and it is only in the current year that jute prices have ruled high. The effect of the high prices has been immediate; the country expects to reap a bumper crop in the coming season beginning July of anything between 7.5 and 8 million bales.

But if anyone thought that an easier raw jute supply position would weaken the bargaining strength of the industry, he has been proved wrong. The industry has a strategy for every situation, and it knows how to push it. What it is now saying is that unless the industry gets adequate bank credit on liberal terms it would not be able to buy raw jute in large quantities and if it fails to purchase the stocks, the price will fall. The problem of course is how to ensure that the credit really goes into buying the fibre and not financing undesirable activities.

The industry is also making a lot of noise about sacking purchase by the Directorate General of Supplies and Disposal. It says the DGS and D, taking advantage of the industry's distress sales, is pushing down prices far below even the cost of production. The IJMA has been pressing the government to adopt a long-term purchase plan and fix a "fair price" for sacking. The DGS and D's view broadly is that it is also in business and cannot be vested with the responsibility of coming to the help of an industry which cannot keep its own house in order.

### West Bengal

#### Strange Denouement

THE murder of Hemanta Basu, the Forward Bloc leader, in Calcutta in

February 1971, on the eve of the elections to the West Bengal assembly, had attracted nation-wide attention. By contrast, the judgment of the City Sessions Court, Calcutta, delivered on Friday last, acquitting all the six persons charged with the murder has been scarcely noticed, except in Calcutta newspapers.

Press reports of the 40-page judgment suggest how poorly the judge thought of the prosecution's case against the accused. The charge of conspiracy was dismissed "not only for want of proper corroborative evidence but also for improbabilities inherent in the story itself". The judge also found support for the defence suggestion that the three principal prosecution witnesses were police informers and had been made to say things at the dictation of the police on being assured that "the police would not proceed against them any more in any case".

The entire investigation of the case by the police had in fact followed the same listless pattern. Some arrests had been made, including of some CPI(M) supporters, immediately after the murder. Later some others, this time including some from Hemanta Basu's own party, the Forward Bloc, and some so-called Naxalites, had been picked up. However, all of them, except one, were eventually let off by the police. The case against the remaining single suspect was proceeded with half-heartedly till the middle of 1973 when, on an application by the police, it too was quashed.

It is worth recalling these details only because of the political use which had been made of the murder of Hemanta Basu. With the assembly elections less than a month away, a systematic propaganda campaign was launched holding the CPI(M) responsible for the murder. The funeral procession the day after the murder was converted into a massive attempt to rouse public sentiment against the CPI(M). At a condolence meeting organised at the Calcutta maidan, a resolution was passed explicitly accusing the CPI (M) of the crime. There is no doubt that this well organised propaganda had a profound influence on the CPI(M)'s fortunes in the assembly elections. It was estimated at the time that the propaganda over Hemanta Basu's murder had cost the CPI(M) as many as 35 seats, each of which it had lost by a margin of less than 2,000 votes.

Against this background, it is neces-



sary to record that the police was unable at any stage to bring serious charges against any one connected with CPI(M). And with last week's acquittals, the real murderers of Hemanta Basu will go unidentified and unpunished — a strange denouement considering that at one time so many were so certain that they knew exactly who had been responsible for the crime. Or, perhaps, not so strange after all.

## Taxation

### Less Evasion?

THE rates of personal income-tax have been reduced sharply in the last two years. In the budget for 1974-75 the rate on the highest income slab was lowered from 97.75 per cent to 77 per cent, with corresponding reductions at all levels. And in the latest budget the rates were further cut, with the highest marginal rate coming down from 77 per cent to 66 per cent. The rationale of these reductions, as set out in the Finance Minister's budget speech on both occasions, was that very high rates of tax encourage tax evasion. This was also the argument of the Direct Taxes Enquiry Committee which had recommended that the highest marginal rate of income-tax be brought down to 75 per cent. The government has gone one better and reduced the rate to 66 per cent. Following from the justification of lower tax rates on grounds of discouraging tax evasion, it has been argued on behalf of the government that reduction in tax rates, by leading to better tax compliance, will result in larger tax collections.

However, the revised estimates of revenue from personal income-tax for 1974-75, presented together with the budget for 1975-76, did not bear out this expectation. The revised estimate showed revenue from personal income-tax in 1974-75 at Rs 747 crores, compared to Rs 745 crores in 1973-74. On the basis of the rise in national income at current prices between the two years, it was estimated by I S Gulati in this journal (March 13) that the revenue from personal income-tax should have been Rs 154 crores higher in 1974-75 than in 1973-74. In other words, the reduction in tax rates, far from resulting in higher tax collection because of better tax compliance, appeared to have resulted in loss of tax revenue to the tune of Rs 150 crores. There was thus very strong ground for doubting that the reduction in tax

rates had led to better tax compliance and less evasion.

The final figure of revenue from personal income-tax in 1974-75, presented together with the budget for the current year, appeared to upset this argument. For the final figure showed an unexplained jump in the collection from personal income-tax of as much as Rs 127 crores over the revised estimate, from Rs 747 crores to Rs 874 crores. This sharp rise was presumably the basis of the Finance Minister's claim, in his last budget speech, that the expectation that the reduction in tax rates would lead to better tax compliance had been fulfilled. This claim supported the further reduction in tax rates effected in the 1976-77 budget.

But how reliable is the figure of Rs 874 crores of revenue from personal income-tax in 1974-75? This question is raised by K N Raj in his article published elsewhere in this issue. The larger part of the revenue from income-tax goes to the state governments. Raj points out that whereas the share of the state governments in revenue from income-tax had not slipped below 70 per cent in any year since 1970-71, it fell very sharply to 59 per cent in the final accounts for 1974-75. While the final accounts show the collection from personal income-tax in 1974-75 to be Rs 874 crores compared to the revised estimate of Rs 747 crores, the states' share is shown at Rs 512 crores or the same as indicated in the revised estimates. No explanation is available for this and the consequent sharp drop in the states' share of revenue from personal income-tax from 69 per cent (1974-75 revised estimate) to 59 per cent (1974-75 accounts).

Since so much has been made of the "striking increase" in income-tax collections in 1974-75, the Finance Ministry should answer the doubts raised about the final figure of revenue from personal income-tax in 1974-75. Till these answers are forthcoming, the suspicion will remain strong that the sharp cuts in tax rates have not brought about any worthwhile improvement in tax compliance and have led, as a result, to substantial loss of tax revenue.

## Olympic Games

### The Sporting Life

WHAT is interesting about the latest ritualistic exhortations from important sports officials about the undesirability

of mixing politics with sports is not its uniqueness, nor even its timing just before the Olympic games, but the "provocation". The latest homily on this subject by the US Olympic committee includes a threat to withdraw from the Montreal Olympics because the Montreal Organising Committee, following the lead of the Canadian government, has ruled that Taiwan cannot be allowed to participate in the Olympic games.

It should be evident that no form of human activity, let alone such a highly organised, State-patronised, multi-million dollar extravaganza as modern competitive sports, can ever be entirely free from political influences. Interference by persons and interests not even remotely connected with a sporting event — itself a misnomer in view of the utter absence of anything sportive in modern competitive sports — has long been a well-established fact. There might have been a time when competitiveness existed purely at an individual level, though even this is doubtful in view of the fact that ancient olympic games were described as "demonstration of national pride"; but such has certainly not been the case in the 20th century when "nationalism" in the worst sense of the term has been rampant; and at least since the Berlin Olympics, every international sports meet has been heavily surcharged with political significance. One has only to think of the extraordinarily strong passions roused in India and Pakistan over the Olympic hockey tournament, a minor event in the olympic games. There has even been a lot of bloodshed in the name of competitive sports, and not merely in Munich, 1972.

More interesting than the US Olympic committee's indignation are the circumstances that have given rise to this indignation. Taiwan's manifestly absurd claim to represent the whole of China should never have been taken seriously; and the Montreal Organising Committee's stand has not been of a kind that should have called forth such a strong stand in favour of Taiwan. It is unlikely that such a strong stand on what after all is a political question has been taken without tacit encouragement by the US government. Thus the collusion between China and the US which is a pet theme of much of the comments on international big power relations, is certainly not in evidence in the power games at Montreal.



# THIS IS AN ANNOUNCEMENT AND NOT A PROSPECTUS

Announcement regarding the Issue of 7,20,300 Equity Shares of Rs 10/- each and 23,000 - 11% Redeemable Cumulative Preference Shares of Rs 100/- each; both at par, for cash.

## Cold Rolling Mill Complex of Nagarjuna Steels Limited

REGISTERED OFFICE: 111, SAROJINI DEVI ROAD, SECUNDERABAD 500 003, ANDHRA PRADESH.  
(Incorporated on 29th July, 1974 under the Companies Act 1956)

Copies of the Prospectus and Forms of Application may be obtained from the Registered Office of the Company, Managers to the issue, Underwriters, Brokers and Bankers to the Issue named herein or any of the branches of the Bankers to the issue mentioned herein.

Application has been made to the Stock Exchanges at Hyderabad and Bombay for permission to deal in and for an official quotation for the Equity and Preference Shares of the Company.

The subscription list will open at the commencement of Banking hours on Wednesday, 7th July, 1976 and will close at the close of the Banking hours on Saturday, 17th July, 1976 or earlier at the discretion of the Board of Directors but not before Friday, 9th July, 1976.

### HISTORY AND PROMOTERS:

The Company was Incorporated on the 29th July 1974, as a public limited company in the State of Andhra Pradesh. The Andhra Pradesh Industrial Development Corporation Limited, Hyderabad has jointly promoted this venture with a technocrat cum professional manager, Shri K. V. K. Raju. Shri K. V. K. Raju, the Co-promoter, in addition to having Master's Degrees in Mechanical and Industrial Engineering from America, has worked for 20 years in Senior management positions in large national and international Companies in India and America.

### PROJECT AND BUSINESS PROSPECTS

The project envisages setting up facilities for the manufacture of 12,000 tonnes per annum of sophisticated Cold Rolled Steel Strips (CRSS). The total cost of the Project is estimated at Rs. 510 lakhs. The unit is located in the Industrial Estate of Patancheru, 18 miles from Hyderabad, in Medak District, which is a centrally notified backward area. The Company is thus eligible for various Central and State Government financial incentives.

Cold Rolled Steel Strips have a variety of applications due to their superior surface finish, fine gauge tolerance and physical properties imparted during cold rolling. They find extensive applications in the manufacture of bicycles, scooters, automobiles, fans, typewriters, calculators, electric irons, refrigerators etc. Cold Rolled Strips are also used in the manufacture of bimetallic bearings, cages for ball and roller bearings and components of electronic equipment. This wide range of products require about 310,000 tonnes of CRSS per annum which is partly met by domestic suppliers to the extent of 110,000 tonnes. The unsatisfied gap of about 200,000 tonnes is presently being met by imports. Thus the products to be manufactured by the company will be 100% import substitution and will effect a saving of about Rs. 3.60 crores per year in valuable foreign-exchange, for the country. The Company's products have not only a reliable home market but tremendous export possibilities.

### SALIENT FEATURES OF THE PROJECT

- \* **PROFESSIONAL MANAGEMENT** — A dynamic Chief Executive with wide experience in international companies.
- \* **EXCELLENT DEMAND FOR ITS PRODUCTS** — 100% Import substitution items — ready market.
- \* **A BASIC INDUSTRY** — Steady demand for years to come.
- \* **MODERN MACHINERY** — Design know-how from America, Germany and England.
- \* **FULL AVAILABILITY OF RAW MATERIAL** — Assured supply of raw material from Bokaro, Rourkela: Durgapur and Tata Steel Plants.
- \* **STRONG TECHNICAL BACKING** — From Leading Consultants, MECON (India) Ltd.
- \* **TREMENDOUS GROWTH POTENTIAL** — For setting up industries using own products.
- \* **JOINT VENTURE** — Combines security of Government participation and dynamism of the private sector.
- \* **ONE OF THE LARGEST** — Among units of its kind in the country.

- \* **LOCATION IN BACKWARD AREA** — is eligible for attractive financial incentives from Government.
- \* **ATTRACTIVE RETURNS** — On your investments.

### SCHEDULE OF IMPLEMENTATION

The implementation of the entire Project has been planned on a scientific and systematic basis, thus enabling the completion of the Project in record time. Orders for the major long delivery equipment were placed as early as August 1974. Civil works were started in November, 1975 and are at an advanced stage of completion. Foundation for the Rolling Mill and associated equipment have been completed. Structural work is scheduled for completion in July. Supplies of imported and indigenous equipment have commenced and all equipment is expected to be at site by September, 1976. Trial production will commence in October and the plant is expected to go into commercial production by January, 1977.

### SHARE CAPITAL

		Rs
A. AUTHORISED:		
20,00,000 Equity Shares of Rs. 10/- each	...	2,00,00,000
30,000 Preference shares of Rs. 100/- each	...	30,00,000
		<u>2,30,00,000</u>
B. ISSUED, SUBSCRIBED & PAID-UP:		
700 Equity Shares of Rs. 10/- each fully paid up, subscribed by and allotted to the subscribers to the Memorandum and Articles of the Association of the Company	...	7,000
1,93,891 Equity Shares of Rs. 10/- each fully paid up, subscribed by and allotted to promoters, Directors, their friends and associate concerns as fully paid-up shares for cash at par	...	19,38,910
1,94,191 Equity Shares of Rs 10/- each fully paid up, subscribed by and allotted to the Andhra Pradesh Industrial Development Corporation as fully paid up shares for cash at par	...	19,41,910
3,46,218 Equity Shares of Rs. 10/- each on which Rs: 2.50 per share has been paid up of which 1,73,109 shares have subscribed by and allotted to the Andhra Pradesh industrial Development Corporation and 1,73,109 shares have been subscribed by and allotted to the Promoters, Direc-		



tois, then friends and associates for cash at par.	...	8,65,545
		<u>47,46,365</u>
<b>C. PRESENT ISSUE FOR CASH AT PAR</b>		
35,000	Equity shares of Rs. 10/- each	73,50,000
23,000	11% Redeemable Cumulative Preference Shares of Rs. 100/- each.	23,00,000
		<u>96,60,000</u>

<b>D. OUT OF THE PRESENT ISSUE:</b>		
14,700	Equity Shares of Rs. 10/- each have been reserved for allotment to the Andhra Pradesh Industrial Development Corporation Limited for cash at par.	...
		<u>1,47,000</u>
		<u>1,47,000</u>

<b>E. NOW OFFERED TO THE PUBLIC FOR CASH AT PAR IN TERMS OF THIS PROSPECTUS:</b>		
7,20,300	Equity Shares of Rs. 10/- each	Rs. 72,03,000
23,000	11% Redeemable Cumulative Preference Shares of Rs. 100/- each	Rs. 23,00,000
		<u>Rs. 95,03,000</u>

#### TERMS OF PAYMENT

Application for shares must be for a minimum of 50 shares or multiples thereof in the case of Equity Shares and 5 shares or multiples thereof in the case of Redeemable Cumulative Preference Shares and the amount payable on the respective shares will be as follows:

	Equity Shares (Per share)	Redeemable Cum-Pref Shares (Per share)
On Application	Rs. 2.50	Rs. 25.00
On Allotment	Rs. 2.50	Rs. 25.00

The balance of Rs. 5/- per Equity Share and Rs. 50/- per Redeemable Cumulative Preference Share will be payable in such calls as may be determined by the Board of Directors of the Company provided that no call shall be made payable within one month of allotment as also within one month after the last preceding call was payable. At least 14 days notice shall be given by the company for payment of each call.

#### BOARD OF DIRECTORS

Name Address & Occupation

- Shri M Venkataratnam IAS**  
1-8-661 Azamabad, Hyderabad-500 020.  
(CHAIRMAN)

Other Directorships

Managing Director

A.P. Industrial Dev. Corpn. Ltd.

Chairman:

Business Machines India Ltd.

Andhra Pradesh Carbides Ltd.

and other Companies

- Shri (Dr) N C B Nath**

92, Jor Bagh New Delhi-110 003

Director of Indian Iron & Steel Co. Ltd.

Hindustan Steels Ltd.

Steel Authority of India Ltd. (SAIL)

and other Companies

- Shri R Ramaseshaiah**

94/2 RT Vijayanagar Colony

Hyderabad-500 028

Executive Director A P Steels Limited

Director A P Industrial Gases Limited

- Shri B G Shastry (Metallurgist)**

2-2-18/19 Bagh Amberpet

Hyderabad-500 013

Managing Director Ductron Castings Limited

Director Nitin Castings Limited

Saslar Malleable (Pvt.) Ltd.

- Shri K Umapathy IAS**

Venkat Bhavan Uma Begh Public Garden Road

Hyderabad-500 026

Managing Director

Andhra Pradesh State Trading Corpn.

Director Gagappa Cables Limited

Alkan Metals (Pvt.) Ltd.

- Shri K V K Raju**

72-6-7 East Marredpally

Secunderabad-500 026

(MANAGING DIRECTOR)

Director Nagarjuna Marketing (Private) Ltd.

- Shri R Venkata Rama Raju**

428/3 RT Sanjeeva Reddy Nagar

Hyderabad-500 038

#### AUDITORS

M Bhaskara Rao & Co.

Barman Building Gunfoundry

Hyderabad-500 001

#### ISSUE HOUSE

Milan Investments (P) Ltd.

Bhupen Chambers Dalal Street, Fort

Bombay-400 023

#### BANKERS TO THE COMPANY

- State Bank of India  
Rashtrapathi Road Secunderabad-500 003
- State Bank of Hyderabad  
Rashtrapathi Road Secunderabad-500 003
- The Andhra Bank Limited  
Marredpally, Secunderabad
- Indian Overseas Bank  
Mahatma Gandhi Road, Secunderabad-500 003
- Syndicate Bank  
Nizamshahi Road Hyderabad-500 001
- Canara Bank  
Rashtrapathi Road Secunderabad-500 003
- The Vysya Bank Limited  
General Bazar Secunderabad-500 003

#### UNDERWRITING

The entire issue of Equity and Preference Shares now offered for subscription has been underwritten as follows:

Name of Underwriters	Nominal value shares underwritten (Rs in lacs)	Equity	Preference
1. Industrial Development Bank of India (IDBI) New India Centre 17, Cooperage Bombay-400 039	34.53	—	—
2. Industrial Finance Corpn. of India (IFCI) Bank of Baroda Building 16, Parliament Street New Delhi-110 001	5.50	2.00	—
3. The Industrial Credit & Investment Corpn. of India Ltd. (ICICI) 163, Backbay Reclamation Bombay-400 020	8.00	5.00	—
4. Life Insurance Corporation of India (LIC) Yogakshema Jeevan Bima Marg Bombay-400 020	8.00	5.00	—
5. General Insurance Corpn. of India (GIC) Industrial Assurance Bldg. Churchgate Bombay-400 020	—	1.50	—
6. The New India Assurance Co. Ltd. New India Assurance Bldg. M. G. Road Bombay-400 023	—	1.50	—
7. United India Fire & General Insurance Co. Ltd (UIFG) Uco Bank Bldg. 13/16, Thambu Chetty Street Madras-600 001	—	4.00	—
8. Oriental Fire & General Ins. Co. Limited (OFGI) Jeevan Udyog A-25/27, Asaf Ali Road New Delhi-110 001	—	4.00	—
9. Central Bank of India Chander Mukhi Nariman Pt. Bombay-400 021	5.00	—	—



Walchand Hirachand Marg.		
Ballard Estate		
Bombay-400 038	5.00	—
11. Canara Bank 112, J C Rd.		
Bangalore-560 002	3.00	—
12. Syndicate Bank		
Post Box No. 1		
Manipal-576 119	3.00	—
Karnataka.		
	72.03	23.00

In the opinion of the Directors of the Company, the resources of the underwriters are sufficient to discharge their respective obligations.

#### BROKERS TO THE ISSUE

##### BOMBAY

1. Bhupendra Champaklal Devidas Bhupen Chambers Dalal Street Bombay-400 023
2. Batlivala & Karani Union Bank Building Apollo Street Bombay-400 023
3. D S Purbhoodas & Co. Stock Exchange Bldg. Apollo Street Bombay-400 023
4. Lewis & Jones Bank of Baroda Building Apollo Street Bombay-400 023
5. Prabhudas Lilladhar Stock Exchange Bldg. Apollo Street Bombay-400 023
6. Porecha Brothers Stock Exchange Bldg Apollo Street Bombay-400 023
7. Merwainjee Bomanjee Dalal Allahabad Bank Buldg. Bombay Samachar Marg.

##### AHMEDABAD

1. Champklal Bhailal Chokshi Manek Chowk Near Share Bazar Ahmedabad-380 001
2. N L Parikh Manek Chowk Near Share Bazar Ahmedabad-380 001

##### CALCUTTA

1. Place Siddons & Gough Pvt. Ltd. 6, Lyons Range Calcutta-700 001
2. M M Murarka & Company 1/B Mandeville Gardens Calcutta-700 001
3. Stewart & Co. 14, India Exchange Place Calcutta-700 001

##### DELHI

1. Harbans Singh Mehta & Co. 33, Regal Bldg. Parliament Street New Delhi-110 001
2. Bharat Bhusan & Co. H-45, Cannaught Place New Delhi-110 001.
3. Vinod Kumar & Co. A-6 Cannaught Place New Delhi-110 001
4. J C Mehta & Co. Delhi Stock Exchange Bldg. New Ali Road New Delhi-110 001

##### MADRAS

1. Venkatraman & Co. 322/323 Linghi Chetty Street Madras-600 001
2. Chitra & Co. 322/323 Linghi Chetty Street Madras-600 001
3. Subramaniam & Co. 13/14, Second Line Beach Madras-600 001
4. Paterson & Co. Vanguard House 11/12. Second Line Beach Madras-600 001
5. M R Arunachalam 3, Seethamma Road Teynampet Madras-600 018

##### BANGALORE

1. M Nanjappaiah Jahgirdar 205, Cavalry Road Bangalore-560 042..
2. Vijai & Co. 9, Eleventh Main Road Malleswaram Bangalore-560 003
3. Sathyaprakash & Co. 3rd Floor, Indian Bank Bldg. Kempagowda Road, Bangalore-560 009.

##### INDORE

1. Pushkarlal Ghulawala 44, Bada Sarafa, Indore-452 002.

##### HYDERABAD

1. Laxmin Narayan Rathi 4-5-173, Hasmat Gunj, Sultan Bazar Hydrabad-500 001
2. S S Sodhi 5-9-1110/3, King Kothi Road Hydrabad-500 601

#### BANKERS TO THE ISSUE

Application forms will be accepted at the Bankers to the issue and their main branches as listed below:

1. State Bank of India, Bombay Samachar Marg, Bombay-400 023 Alleppy, Ahmedabad, (Main Branch) Aurangabad,

(Strand Road). Delhi (Parliament Street), Eluru, Ernakulam, Guntur, Hyderabad City, Hubli, Indore City, Kanpur, Kurnool, Madras (North Beach), Nagpore, Rajahmundry, Salem, Secunderabad, Tadepalligudem, Trivandrum, Vijayawada.

2. Central Bank of India M G Road Bombay 400 001 Adoni, Ahmedabad (Relief Road), Baroda (Panigate), Bangalore (Avenue Road), Belgaum, Ernakulam, Gudivada, Guntur Hyderabad-Charminar Fateh Maidan, Khairtabad, Mushirabad, Nampally, Indore, (Cloth Market), Kakinada, Kurnool, Kanpur, (Karachi Khana), Madras, Nellore, Nizamabad, Nagpur, New Delhi (Janpath), Ongole, Panaji, (Goa), Poona (Camp.), Rajahmundry, Samalkot, Secunderabad, Surat, Salem, Tanuka, Tenali, Trivandrum, Visakhapatnam (Gandhi-gram), Vijaywada, Srinagar.

3. Bank of Baroda Bombay Samachar Marg Bombay-400 023 Ahmedabad (Gandhi Road), Bangalore, (Kempagowda Road), Calcutta, (India Exchange). Hyderabad (Abid Circle), Indore (Sitalamata Bazar). Jamshedpur (Bistupur), Kanpur (Birhana Road), Madras (N B Road), New Delhi (Parliament Street), Nagpur (Dharampeti), Surat (Bhagataly), Secunderabad.

4. Canara Bank Calicot House, Tamarind Lane Bombay-400 001 Ahmedabad (Revidi Bazar), Bangalore (Town Hall) Baroda (Raopura) Calcutta (Brabourne Road), New Delhi (Janpath), Hyderabad (Abid Road), Madras (Thousand Lights), Secunderabad (Rashtrapathi Road).

5. State Bank of Hyderabad New India Assurance Bldg. M G Road Bombay-400 023 Bhoodhan, Hyderabad City, Jagtiyal, Kothagudem, Karimnagar, Metapalli, Mahabubnagar, Nirmal, Nizamabad, Nalkonda, Patancheru, Sangareddy, Secunderabad, Suryapet, Warangal.

6. The Andhra Bank Limited Nanavati Mahalay Homi Mody Street Bombay-400 023 Hyderabad City, Secunderabad City, Proddatur Anantapur, Cuddapah, Nandyal, Chittore, Tirupati, Chirala, Narsarapet, Anakapalli, Bobbli, Machilipatnam, Narsapur, Bhimavaram, Tunj, Ramachandrapuram, Amalapuram, Velangi, Vanam Mandepeta, Yelamanchili, Kaikalur, Ganapavaram, Akividi, Mughaltur, Siddhantam, Kothapet, Bapatla.

7. Syndicate Bank Homji Street Bombay-400 001 Ahmedabad, Bangalore, Calcutta, Hyderabad, Madras, New Delhi, Indore, Secunderabad, Guntur, Visakhapatnam, Vijayawada, Kakinada, Rajahmundry.

8. The Vysya Bank Limited 586, Chira Bazaar Jagannath Shankar Seth Road Bombay-400 002 Bangalore (Avenue Road), Davangere, Hassan, Hubli, Mercara, Mysore, Raichur, Dharmawaram, Hyderabad (Siddamber Bazar), Secunderabad, Vijayawada (R R Rao Street), Kakinada, Madras, Coimbatore.

#### HOW TO APPLY

Obtain copies of Prospectus and Application Forms from the Registered Office of the Company and/or from the Brokers. Underwriters Bankers and Managers to the Issue mentioned herein. Fill in and sign the Application Forms (Applications must be for 50 Equity or 5 Preference shares or multiples thereof) and deliver them together with Cash or Bank Draft or cheque at the rate of Rs 2.50 per Equity or Rs 25/- per Preference Shares at any of the branches of the Banks listed above. Cheques and Drafts should be on Banks situated in the town where applications are submitted.



**CHAMPAKLAL  
INVESTMENT &  
FINANCIAL  
CONSULTANCY  
LIMITED**

Bhupen Chambers, Dalal Street, Bombay-400 023



**Nagarjuna Steels Limited**

#### Remember :

List Opens on Wednesday 7th July 1976.  
List Closes on Saturday 17th July, 1976.  
But not before Friday 9th July, 1976.



## Clippings

Minister of state for Home, Om Mehta, said today the Congress Party's 1971 'garibi hatao' call could become a distinct reality in just five years, if only the tempo of spectacular growth since the emergency was kept up.

*The Hindustan Times*, June 30

Most of the Fifth Plan targets for the vital sectors of the economy are being scaled down. This follows a recent reappraisal of the original projection by the Planning Commission in consultation with the concerned ministries and other key public sector organisations...

*Financial Express*, June 28

On the eve of the first anniversary of the Prime Minister Mrs Indira Gandhi's 20-point programme, Tass said today that "the recent advances and achievements and the government's resolve to carry through radical socio-economic reforms it had launched held out more optimistic prospects for the Indian people than ever before".

*The Times of India*, July 1

A Soviet delegation will visit India shortly to discuss a 15-year plan for exporting up to Rs 300 crores of Indian equipment for Soviet-aided projects in third countries.

*The Times of India*, June 28

The current rise in the wholesale price index is causing concern to the government. The matter is likely to be discussed shortly by the Union Cabinet.

*Financial Express*, June 27

Word has gone round that scheduled commercial banks should now adopt a low profile on the issue of credit discipline.

*The Economic Times*, June 30

A major policy change with regard to sick units is in the offing. The government is exploring the possibility of takeovers and mergers of sick units with the healthy private sector units.

*Financial Express*, June 27

Financial institutions have expressed themselves against any blanket offer of fiscal concessions for encouraging merger of weak units with the strong.

*The Economic Times*, July 1

Dr Gopaldas Nag, Labour Minister, government of West Bengal, said here [Calcutta] today that nine jute mills were at present closed and "certain machines" in 46 more units were inoperative, leaving an estimated 50,000 workers idle daily.

*The Economic Times*, June 29

Mr S M Dwivedi, land reforms adviser to the central government yesterday advocated the inclusion of agriculture in the concurrent list for speedy implementation of land reform measures initiated under the 20-point programme... After reviewing the progress in the states, Mr Dwivedi felt that very few would be able to distribute land to all landless by June 30 — the deadline accepted by all states at the chief ministers' conference held in March this year.

*The Hindustan Times*, June 26

The Gujarat government has received so far only three complaints about bonded labour, a practice that has been abolished in the country.

*The Economic Times*, June 28

An official fact-finding team of the labour ministry has reported large-scale illegal recruitment of poverty-stricken landless rural people of Orissa who are forced by contractors to work as bonded labourers in neighbouring and distant states.

*Patriot*, June 30

An entrepreneur may now submit a proposal for setting up any of the 73 banned industries provided he can indicate its special features through techno-economic survey.

*Business Standard*, June 25

Next to Casino it is going to be greyhound racing as the newest of pleasures awaiting Bombaymen. The Maharashtra government has decided to permit greyhound racing in the city as another tourist attraction and an added source of revenue for the state exchequer.

*Free Press Journal*, June 25

The Delhi Transport Corporation will start from Monday a novel bus service called the 'Sham-e-Delhi Service' which will enable "gentlemen to go places in the evening" according to DTC chairman U S Srivastava.

*Patriot*, June 28

There are nine states and union territories which have no railway lines. They are: Manipur, Meghalaya, Arunachal Pradesh, Mizoram, Sikkim, Nagaland, Andaman and Nicobar Islands, Dadra-Nagar Haveli and Lakshadweep.

*The Assam Tribune*, June 25

Family planning in Uttar Pradesh has been made statutory for all government servants. Adoption of family planning and motivation for it have been included in their service conditions.

*Indian Nation*, June 27

Under new deterrents prescribed by the [UP] state government against having more than three children, every 'eligible' person who fails to get himself or his spouse, as the case may be, sterilised within three months from now... would be evicted from his allotted house if owned by the state government or UP Housing Development Board or any development or local authority, after being declared unauthorised occupants.

*The Hindustan Times*, June 26

The UP government has issued an order under the DIR, the UP Essential Articles and Things (Restriction on Grant of Supply to Unplanned Families) Order, disqualifying persons who do not get themselves sterilised within three months of the issue of the Order from getting more than four units of ration.

*Patriot*, June 26

Government employees in Madhya Pradesh having more than three children and still in the reproductive age-group will not be entitled to government accommodation if they fail to get sterilised by December 22, according to a state government directive.

*The Times of India*, June 26

Those who do not want to follow family planning should leave the Capital, Chief Executive Councillor Radha Raman said on Sunday.

*Patriot*, June 28

The Central government proposes to enact a law to take action against journalists who violate the code of ethics recently evolved by the Central Committee of the All-India Editors' Conference.

*Patriot*, June 28

The Information and Broadcasting Minister, Mr Vidya Charan Shukla, today unequivocally told the personnel of All-India Radio and Doordarshan that they would have no place in these organisations if they did not subscribe to national policies.

*Free Press Journal*, June 29

He [Minister for Information and Broadcasting] refuted Opposition allegations that AIR broadcast lies and falsehood and said that the radio was engaged in nation-building and broadcast whatever was in the national interest.

*The Hindu*, June 29

The Harijan minister of Maharashtra, Mr A S Kasture, who holds the portfolio of social welfare, was prevented by priests from entering the sanctum sanctorum of the Balaji temple in Buldana on Monday...

*The Times of India*, June 25

### CENTRE FOR DEVELOPMENT STUDIES

Ullloor, Trivandrum 695011

APPLICATIONS are invited for a few posts of Research Associates in the Centre from economists/statisticians adequately qualified for research in problems of applied economics. Appointment in the scale of either Rs. 700-40-1100 or Rs. 700-40-1100-50 1600 will be made initially for a fixed term of 2 years, but may be made permanent on the basis of an evaluation of the work during the term of appointment. Research Associates will be given opportunity to devote part of their time to own professional work, including dissertations for research degrees. Applications in the prescribed form (available in the Centre) should be accompanied by a detailed statement indicating a research problem that interests them and the method of analysis they would employ for studying it. Those called for interview will be paid return second class fare by rail.

The last date for receipt of applications is July 25, 1976.

Director



## Boom in Tractors with World Bank Help

Hansavivek

ESCORTS' 1975 results are pleasing, with impressive growth in sales and profits. As power constraints disappeared, higher output was achieved, with reduced volume of inventory. Borrowings were also reduced. Despite the general recession in the engineering industry, sale of Escorts tractors was higher at 9,659 units as against 8,239 units in the previous year. Sale of piston assemblies was 56 per cent higher, and of motor cycles and scooters up from 17,132 units to 24,476 units. Almost all the product lines showed higher sales, except automobile shock absorbers which suffered owing to the recession in the automobile industry. By far the most impressive advance was recorded by exports sales at Rs 17.97 crores from previous year's Rs 2.25 crores. Major contribution came from sales of tractors made under the World Bank scheme, accounting for Rs 13.45 crores. Other exports included

implements and railway and automobile shock absorbers. The company also obtained an order for providing consultancy services for the PVC cables project. H P Nanda, chairman, says that the tractor division could hardly break even, as due price increase was not allowed, though costs were higher than in the previous year. From mid-January, prices of tractors have been decontrolled, except in case of Ford and Massey-Ferguson. The company increased prices of Escorts tractors after decontrol, but it claims that the ultimate price to customers is still Rs 3,000 to Rs 4,000 lower than of competitive brands. The enhanced price will give the tractor division a reasonable return and profitability. The company won, against global competition, another order of 160 Ford tractors from Nepal — this time under Asian Development Bank credit. Orders for 100 Escorts tractors were received from Afghanistan, and for sub-

stantial quantities of specially designed agricultural implements from West Asian countries. Negotiations are under way in Sri Lanka, where tenders have been submitted for Ford tractors. The company is favourably placed to cater to a substantial requirement of Ford tractors from Pakistan, for which quotations have been submitted through STC. It is participating in a joint venture in Iran for manufacture of automotive shock absorbers in association with promoters in that country. A new company under the name and style 'Iran Auto Accessories' is proposed to be formed in Iran for this purpose. Of its initial subscribed capital of Rs 108 lakhs, Escorts will be investing up to Rs 33 lakhs. Participation in this venture will enable Escorts to export components required in the manufacture of automotive shock absorbers and also have a sound base to introduce its other products in that market. CGR-India at Santa Cruz Electronic Export Processing Zone, Bombay, which is a joint venture in association with a world famous French firm for manufacture of medical X-ray equipment for

### The Week's Companies

(Rs in Lakhs)

	Escorts		Gokak Patel		Nat Rayon		Sandvik Asia	
	Latest Year 31-12-75	Last Year 31-12-74	Latest Year 31-12-75	Last Year 31-12-74	Latest Year 31-12-75	Last Year 31-12-74	Latest Year 31-12-75	Last Year 31-12-74
Paid-up capital	603	603	272	272	673	575	132	132
Reserves	615	439	301	323	960	836	335	275
Borrowings	729	794	181	191	921	1297	240	184
of which Term borrowings	167	201	27	27	536	526	74	—
Gross fixed assets	1712	1445	760	700	4043	3617	505	443
Net fixed assets	914	752	350	340	1631	1324	234	201
Investments	165	113	93	65	36	42	1	1
Current liabilities	1951	1927	557	568	1390	998	357	357
Current assets	2820	2898	857	923	2275	1793	830	746
Stocks	1808	1950	280	342	1386	932	428	427
Book debts	817	773	529	509	844	729	368	274
Net sales	7708	5752	1615	2102	3554	3046	1293	1027
Other income	227	148	155	165	27	30	42	32
Raw material costs	2495	1967	926	1185	1456	893	412	297
Wages	474	438	452	443	782	686	153	132
Interest	110	119	34	39	96	59	26	28
Gross profit (+)/loss(—)	641	521	148	300	257	600	437	364
Depreciation provision	101	92	51	45	120	97	40	34
Tax provision	315	265	52	150	10	291	308	245
Net profit (+)/loss(—)	225	164	45	105	127	212	89	85
Development rebate provision	6	14	4	11	53	4	1	3
Transfer to reserves	149	101	3	34	4	152	59	53
Dividend								
Amount	P 7 E 63	7 42	P — E 38	— 60	P 10 E 60	10 46	P — E 29	— 29
Rate (per cent)	P 9-10% E 12	9-10% 12	P — E 14	— 22	P 5.55 E 14	5.55 11.60	P — E 22	— 22
Cover (times)	3.36	3.40	1.08	1.56	1.06	4.30	3.03	2.83
Ratios (per cent)								
Gross profit/sales	8.32	9.05	9.16	14.27	7.23	19.60	33.80	14.37
Net profit/capital employed	11.55	8.95	5.97	13.36	4.97	7.13	12.59	14.37
Inventories/sales	23.45	33.90	17.33	16.27	39.00	30.59	33.10	41.57
Wages/sales	6.15	7.62	27.98	21.07	22.00	22.55	11.06	12.28



100 per cent export, has already commenced production. This project is expected to achieve export sales of nearly Rs 70 lakhs in the current year rising upto Rs 4 crores in three years. Plans for expansion of piston and piston pin plants have reached the final stage. The company hopes that agreements with various financial institutions would be signed soon and both the plants would be in commercial production before March 1978.

**GOKAK PATEL VOLKART** has suffered a sharp setback in its working during 1975. On sales of Rs 16.15 crores against Rs 21.02 crores, gross profit has been more than halved at Rs 1.48 crores from Rs 3 crores — reflecting sharp deterioration of margins. Dividend, lower by 8 points to 14 per cent is just covered by earnings. The 'immediate' payment is only 4 per cent. The Gokak mills division continued to work three shifts, seven days a week, but lower yarn realisation at home and abroad adversely affected profitability. Gross revenue from shipping and other activities was slightly better than in the previous year, but results were affected by escalation in costs. The company is in the process of rationalisation of shipping activities at Calcutta which have become uneconomical in recent years. The company is also exploring ways and means of employing resources more remuneratively and, accordingly, realised Rs 14 lakhs by selling away its property at Calicut. The programme of modernisation of mill machinery is continuing. Last year, the company spent Rs 59 lakhs on additions to plant and machinery, including a 1,100 KVA diesel generating set to augment electricity supply. The subsidiary, John Fleming and Company, was able to achieve improved results — mainly because of major reorganisation carried out in the early part of 1975. Patel Cotton increased its turnover but had to contend with lower margins on account of adverse conditions in the textile industry and increased overheads. Bradma of India, another subsidiary, had a satisfactory year, both in terms of profit and turnover. GPV applied to the Central government and RBI for approval to its proposal to purchase 25,200 equity shares of the face value of Rs 100 each fully paid-up in Goodlass Nerolac Paints from Lead Industries of UK. RBI has approved sale of shares by the UK company, subject to the conditions that 5 per cent of these shares be offered to UTI. The company is awaiting approval of government. F H Kemple, who

served the company for 30 years, has resigned from chairmanship. A B Bili-moria has been appointed chairman in his place.

**NATIONAL RAYON**'s results are disappointing. Despite increase in turnover, profits have fallen steeply. This outcome has occurred following an increase in the cost of raw materials and stores by Rs 609 lakhs, power and fuel by Rs 76 lakhs, employees' remuneration by Rs 96 lakhs, and interest by Rs 36 lakhs. Production of rayon textile yarn at 9,531 tonnes was 5 per cent more than in the previous year, but quality deteriorated due to non-availability of high-grade pulp in required quantity, frequent stopping and starting of spinning machines in May and June due to power cut, and higher spinning speeds. The company is modifying the process to improve quality of yarn made from indigenous pulp. Production of rayon tyre cord at 6,448 tonnes was the highest since the start of the plant in 1961. Packed production was 30 per cent higher than in 1974, but despatches showed a fall of 7 per cent owing to lower offtake and recession in the tyre industry. Closing stocks thus increased by 1,432 tonnes. The caustic soda plant suffered owing to power cut and production fell by 23 per cent. Similarly, production of hydrochloric acid declined by 35 per cent and of sulphuric acid by 10 per cent. Equity dividend has been, however, stepped up from 11.6 per cent to 14 per cent, which is payable on the capital increased by issue of 'rights' shares on a one-for-four basis, and is just covered as against 4.3 times last year. Owing to delay in receipt of equipment, erection of nylon-6 tyre cord plant upto draw-twister stage phase-1 was practically completed by the end of September last. The plant was commissioned in December, and the product is under test and trial by tyre manufacturers. Capital expenditure on the project upto the end of 1975 was Rs 7.7 crores. Work on phase-II, textile section, is in progress and is expected to be completed by the end of this year. The company's application for an industrial licence for manufacture of wood pulp and staple fibre is still pending with the government. Process technology has been developed in the company's own research centre. In his annual statement to the shareholders, Shantanu N Desai, chairman, says that the immediate prospects of the company should be viewed with subdued optimism. He adds that, apart from the company's own efforts, the

prospects will largely depend on economic measures by government — particularly on the credit squeeze and reduction in rate of interest, and the steps designed to improve the climate of demand recession.

**SANDVIK ASIA**'s application made in 1971 for expanding production of tungsten carbide products, from 84 tonnes to 150 tonnes per annum, has at last been granted. According to the terms of the industrial licence, the expansion is to be completed and commercial production established within two years; also, foreign shareholding is to be reduced in accordance with the guidelines laid down by government. The expansion will be financed partly by issue of share capital to Indian nationals to the extent of 25 per cent of the total cost — partly by borrowings and partly by internal accruals. The company proposes to undertake a modernisation programme, too, which has been approved by government. The capital goods licence to import certain equipment for the programme is expected shortly. Meanwhile, ICICI has agreed in principle to grant a foreign exchange loan of US dollars 1,776,743 for import of equipment for expansion and modernisation programmes. The company has produced good results for 1975 with higher sales and profits, although gross margins have been lower than in 1974. The unchanged dividend of 22 per cent is covered over three times by earnings against 2.8 times last year. Of the proposed dividend, 12 per cent is the 'immediate' payment and the balance is payable on a 'deferred' basis. In addition, directors have recommended issue of bonus shares on a one-for-three basis. The company's total earnings in foreign exchange were Rs 61 lakhs, while its consumption of imported raw materials and components aggregated Rs 2.85 crores. It also spent in foreign exchange another Rs 63 lakhs, by way of research expenses, interest, travelling, etc, and Rs 7 lakhs on dividend remittance. The auditors were paid Rs 45,000 as fees, besides Rs 8,100 as advisers on taxation matters, Rs 21,250 for 'other services', and Rs 5,272 as out-of-pocket expenses. Commenting on the current year's prospects, the chairman N S Phaterphekar feels it will be a "difficult year" as the turnover during the first four months has slipped to Rs 3.70 crores from Rs 4.35 crores in the corresponding period last year, and the inflow of fresh orders has also slackened.



**KOTHARI (MADRAS)**, a leading industrial organisation operating in South India and presently engaged in textiles, plantations, and fertilisers, is now further diversifying into chemicals in a big way. The company has received an industrial licence for manufacture of 33,000 tonnes of caustic soda, 20,000 tonnes of liquid chlorine, 24,750 tonnes of hydrochloric acid and 21,000 tonnes of ammonium chloride per annum. The project is being located in the Ennore-Manali industrial belt in Madras and will be engineered by Friedrich Uhde of the world famous Hoechst group of West Germany. The estimated cost of the project is Rs 16 crores. This is proposed to be financed by equity capital of Rs 2.78 crores (to be raised in two stages — Rs 1.48 crores now by way of a 'rights' issue at par on a two-for-three basis and Rs 1.30 crores by public issue some time next year), internal generation of Rs 1.72 crores, and term loans of Rs 11.5 crores from the financial institutions and banks. The shareholders participating in the 'rights' issue will be entitled to divi-

dend for the full financial year ending June 30, 1976, even though their investment would be only for a short period. The project is expected to go into commercial production by mid-1978. D C Kothari, chairman and managing director, envisages a chlorine utilisation of over 90 per cent in this project by conversion of a major portion of chlorine into ammonium chloride. He stresses that the viability of a caustic soda plant is largely dependant on the effective utilisation of chlorine. According to him, with the implementation of this project, the company can expect to show a gross profit of Rs 4 crores and net profit of Rs 2 crores on an equity base of only Rs 5 crores. The reliefs proposed in the last budget — viz, grant of investment allowance, funding of surcharge, sur-tax relief, etc, are moreover expected to improve the cash generation by a further Rs 2.50 crores — carrying total cash generation to over Rs 9 crores by 1986-87, and so providing scope for further expansion and diversification.

Having offered this very attractive proposal to large farmers, particularly growers of cash crops like cotton, sugarcane, groundnuts, etc, the state government has appealed to them to contribute generally to its effort to mobilise savings from the rural areas. According to the government's scheme to mobilise surplus incomes from the rural areas, farmers selling their produce to taluka and district produce marketing yards will be asked to buy small savings certificates, on the following basis:

Value of Produce Offered for Sale	Value of Savings Certificates Required to be Bought
(Rs)	(Rs)
upto 500	10
501- 899	20
900-1299	30
1300-1799	40
1800-2300	50
Over 2301	60

According to the government's calculations, cotton growers will buy small savings certificates worth Rs 8 crores annually, sugarcane cultivators Rs 4 crores and growers of other commodities Rs 9 crores.

## FROM OUR CORRESPONDENTS

### MAHARASHTRA

## Small Savings to Escape Taxation

THE Maharashtra government is apparently making a determined effort to step up its small savings collections. The state finance minister, Y J Mohite, announced a number of schemes to this end on Monday last. The most noteworthy among them is the proposal to exempt farmers who buy small savings certificates from payment of land revenue and zilla parishad cess. To get such exemption for ever all that farmers have to do is to buy for five consecutive years small savings certificates of double the value of land revenue and zilla parishad cess payable by them annually. The farmers will, of course, earn interest on the certificates and also get back their investment on the maturity of the certificates.

The Maharashtra finance minister expects to sell small savings certificates of Rs 14 to Rs 16 crores annually to landholders in lieu of land revenue and zilla parishad cess. The state government now collects Rs 9 to Rs 10 crores by way of land revenue annually. The zilla parishad cess — levied on irrigat-

ed lands by the village panchayats and credited to the state exchequer like land revenue — yields another Rs 8 to Rs 9 crores. The collections from land revenue and zilla parishad cess are made available to village panchayats to finance their developmental activities.

According to official statistics, of the total of 49.4 lakh operational holdings with total operated area of 212 lakh hectares in the state, 10 per cent have 10 hectares and more and these account for 40 per cent of the total operated area; 43 per cent of all holdings are small with upto 2 hectares and these account for only 9 per cent of the total area; medium-sized holdings (between two and 10 hectares) account for 47 per cent of all holdings and 51 per cent of the total area. Clearly, therefore, Mohite's small-savings-in-lieu-of-taxation scheme will benefit mainly the large farmers with irrigated land who by making the required investment in small savings can free themselves from land revenue and the zilla parishad cess for ever.

The word has been spread that the Central Government and the Planning Commission are unhappy that the state governments have not been making efforts to introduce effective, progressive schemes of taxation of agricultural incomes. (In Maharashtra, for instance, the agricultural income tax is levied only on those with an annual income from agriculture of Rs 36,000 and over and the total revenue from this source has for many years remained pegged at Rs 35,000 per year.) Evidently, Mohite's schemes for mobilising savings from the rural areas is in the nature of friendly advice to large farmers to come to the aid of the state government lest it be forced by the Centre and the Planning Commission to tighten up taxation of rural incomes. The state government's confidence about mobilising small savings from the rural areas suggests that it expects the large farmers to take the hint. The current year's target for small savings has been fixed at Rs 77 crores as against Rs 66 crores collected in 1975-76 and Rs 40 crores in 1974-75.

Under another scheme agreed upon with the state's co-operative milk federations, members of these federations all over the state are to contribute to small savings at the rate of ten paise per litre, to be deducted at source.



The expected contribution from this source is placed at Rs 10 to Rs 15 crores per annum. Similarly, all government licencees, contractors, and others who benefit from government sanctions and permissions are being approached in groups by the state Directorate of Small Savings and Lotteries to become regular contributors to small savings. It appears that small savings contributions will become an added qualification for award of contracts and licences.

It is not only the rich who are being tapped for small savings. Under the payroll savings scheme, the Directorate of Small Savings has so far been able to enrol 21 per cent of the employees in Central and state government offices, in the organised private sector and in educational establishments. By the end of this year the government expects to cover 80 per cent of all employees under the scheme. The main features of the plan for the current year are to cover all Central government employees working in the state; all state government, zilla parishad and municipal corporation employees; all employees working in the co-operative sector; and all employees in private sector establishments in all the districts except Bombay, Thane, Kolaba and Pune; in these four districts the target will be to cover one-third of the employees in the private sector.

Before finalising the state government's plans to expand the coverage of employees of government offices, public sector undertakings and the organised private sector, the state finance minister held a meeting with top Central and state government officials and executives of public and private sector establishments like LIC, banks, port trust, post and telegraphs and mills and factories as well as leaders of the Central trade union organisations to mobilise their support. At the meeting, Mohite announced that a special incentive would be given to those units which persuade 80 per cent of their employees to join the payroll savings scheme before the end of this year. The incentives will be equal to three per cent of the twelve months' small savings collections from the employees of the respective organisations. This amount would be placed at the disposal of a committee consisting of representatives of the management, the trade unions and the labour commissioner to be utilised for labour welfare activities. This incentive will be in addition to the two per cent commission which the managements already get as work-

ing charges. One fear that has been expressed by trade unionists is that the special incentive of 3 per cent now offered to employers may to an extent enable them to save on their normal expenditure on labour welfare measures.

The Maharashtra finance minister also appealed to managements and trade unions to help the state government to attract a part of the refund of additional wages and dearness allowances impounded in 1974-75 into small savings. According to Mohite, employees in Maharashtra are going to get about Rs 50 crores by way of refund of impounded wages and dearness allowance in July and he wants at least 20 per cent of this to be invested in small savings. In his speech Mohite said, "the heads of the departments of governments, labour leaders, heads of public and private sector organisations are requested to use all their persua-

sive abilities to see to it that promises for obtaining savings are taken in advance and savings are deducted at source from the money payable against the refund of impounded additional wages and dearness allowances."

It is evident, therefore, that the government's small savings drive will make a substantial draft on the meagre earnings of the lower middle class and the working class. As it is, urban employees earning just Rs 500 per month are subject to the employment guarantee tax of Rs 5 per month. Now they will also be required to contribute to the government's small savings collections, though for them there are no juicy incentives comparable to those offered to the rich farmers who are being promised exemption in perpetuity from payment of land revenue in return for relatively modest investments in small savings.

## BIHAR

# Exploited Builders of Bokaro

Arun Sinha

IN Bihar, where over 8 million farm labourers live on a pittance, the Bokaro Steel complex has emerged as the single largest employer. Very few of those employed in Bokaro had any experience as skilled steel workers. TISCO, in Jamshedpur, the other steel plant in Bihar, has produced no surplus skilled labour.

In Bokaro there are four employers: Bokaro Steel Ltd (BSL) Hindustan Steelworks Construction Ltd (HSCL) which is the public sector contractor for the plant, the private construction companies and the ancillaries. The total number of workers employed by these four agencies is estimated at one lakh today. Of these, according to trade union sources, about 40 per cent are tribals. BSL has 32,000 employees on its rolls, including engineers, executives and clerks. HSCL has 18,000 employees and the ancillaries employ some 1,000 people. Taken together, the private construction companies are the largest employers, with nearly 45,000 men on their rolls. The majority of the private companies' workforce is unskilled. They are mostly tribals.

Karam Munda, a tribal who has come a long way from Murhu in Ranchi district to work as an unskilled labourer at Bokaro, says: "I can no longer stay in the village. I must not burden my father — a poor agricultural labourer." Munda gets Rs 226 per month, but

with a family of three and a younger brother to support, spends more than he earns. The unskilled workers at Bokaro have, more or less, the same background. Faced with seasonal and insecure employment and meagre wages, farm workers, mostly young, have come to Bokaro in search of a livelihood. When work was being started at Bokaro, it was farm labourers of the vicinity who supplied the labour. The big landlords had a good time; by virtue of their power and influence over workers in the village, they became 'agents' for labour recruitment and took a cut from the workers' wages.

Of the unskilled labourers at Bokaro, the condition of those employed in the private construction companies is the worst. Workers of BSL and HSCL do get the fixed wages, but not those working for the private companies. They are also made to work longer than the fixed number of hours. The companies do not, of course, care about their housing and most of them were living in the streets of Bokaro or away in uninhabited areas, till the recent demolition drive.

An instance of how the companies flout official regulations on wages came to light recently. There had been repeated complaints that one of the private companies employing about 500



workers was not paying the fixed wages to its unskilled labourers. This company was one of the six "zonal" contract companies, as distinct from the 530 petty contractors who also take sub-contracts from the HSCL. It was a historic event for the faction-ridden trade union movement at Bokaro, where 17 registered trade unions function but only one is 'recognised', when three major unions launched a joint move against the company. The leaders of the Bokaro Steel Employees Union (Congress), the Bokaro Steel Workers Union (INTUC) and the Ispat Kamgar Union (AITUC) filed a strong petition before the BSCL managing director. The state labour department was then approached and a date was fixed for making a surprise check of the payment of wages at the construction site. Accordingly, an inspecting team paid a 'surprise' visit. It sat through the payment of wages to workers on the day. At the end of the payments, it called for the company's wage ledger and the leader of the team scribbled on the margin "Fair wages paid". Every member of the inspecting team then endorsed this comment. What was surprising was that none of the members of the inspecting team noticed the clusters of workers outside the site who were asking each other in amazement, "My God, did you too get Rs 6.35 today?"

But the pleasant astonishment of the workers was short-lived; the next day the company ordered them to return the difference between the wages paid to them the previous day and the actual wages they were being paid. When some of the workers said they had already spent the 'surplus', the company told them that the amount would be treated as advance wages. The company had been paying a maximum of Rs 4 to male unskilled workers and Rs 3.50 to woman labourers, against the HSCL-fixed daily wage of Rs 6.35.

There is a clique of contractors, labour officials, engineers and even trade union leaders that is interested in under payment to labourers. They all share the booty. The private companies forge the 'labour payment certificates' that they have to submit for clearing their bills. These certificates are attested to by the labour inspectors of HSCL. The labour payment certificates are expected to clearly stipulate that the workers have been given the fixed wages at the proper time. However, in many cases, these are issued even when the wage payment has not

been made. The companies often do not pay wages for months, telling the innocent workers that they can be paid only after their bills are cleared by the HSCL. There have been even instances of companies packing up and vanishing from Bokaro once their work was finished and their bills paid by the HSCL, leaving large numbers of workers unpaid for months of work. When complaints regarding such cheating started coming to HSCL in large numbers, it undertook to pay the unpaid wages.

Prices of all commodities are very high at Bokaro. Trade in the steel city is controlled by Gujarati and Marwari traders. The main market at Ghas, on the periphery of Bokaro, is a Gujarati monopoly. There are very

few markets inside the city and in any case the unskilled labourers and even the larger section of the skilled workers keep out of these shopping centres. Only the engineers and other middle-income groups benefit from the regulations requiring shops in these shopping centres to display information about stocks and prices.

As a result of the combination of low wages, high prices and the tribals' addiction to liquor, inevitably moneylenders have made their appearance in the city. Indebtedness is not yet on a very large scale, as the city is only just beginning to grow, but with rates of interest ranging from 10 to 25 per cent per month charged by the moneylenders the workers are bound to get deeper and deeper into debt.

## RAJASTHAN

### Laws and the Poor: A Paradox

SOME of the recent laws designed to facilitate the implementation of the 20-point programme, particularly the freezing of the debts of the rural poor from private moneylenders and the abolition of bonded labour, have created quite a stir in the countryside. In most states, laws to deal with these problems already existed. But the rural poor were not aware of them and the rich moneylenders and landlords did not take them very seriously. Now the rural poor are not only more aware of these laws but they even seem to have greater faith in official intentions. However, despite their awareness, they lack the capacity to benefit from these laws, as may be seen from the following report from villages in Nagaur district of Rajasthan. This is so because the rural poor have neither the organisation or the economic strength to secure the enforcement of the laws.

In this part of Rajasthan, unlike in several other states and unlike even in other parts of Rajasthan such as Udaipur, the problem of indebtedness and bonded labour has not been so severe after the

land reforms of 1952. Following the land reforms the then tenant class, mainly Jats, became economically and politically more powerful, even acquiring the status of moneylenders. In course of time, big farmers belonging to the Jat and Rajput castes actually replaced the traditional moneylenders. Mortgaged land and some forms of bonded labour replaced gold and jewellery as the principal forms of collateral. And these new forms of collateral, of course, fitted well with the overall occupational requirements of the farmers-cum-moneylenders. The borrowers were small farmers and labourers of all castes, but particularly the scheduled castes. Usually, besides mortgaging land, the borrowers' family labour became attached to the big farmers, on a seasonal or annual basis, for farm operations, animal grazing, as well as outmigration with livestock during droughts.

Until 1958-60, when the panchayat raj system was implemented — Rajasthan was the first state to do so — the condition of the rural poor was very

TABLE: NUMBER OF ATTACHED LABOURERS WHO CHANGED THEIR EMPLOYER/MONEYLENDERS

	1972-73	1973-74	1974-75	1975-76
(A) Attached labourers who changed employer once or more often	20 (19)	19 (24)	21 (26)	1 (25)
(B) Attached labourers who remained attached to a single employer	3 (18)	4 (21)	2 (23)	22 (26)
Debt repaid per family of attached labourer (Rs)	335	570	483	785

Note: Total number of attached labourers is 23 from three villages. Figures in brackets indicate monthly average wage (excluding perquisites) per labourer in rupees.



bad with private credit being used as an effective lever for their exploitation. The panchayat raj system sharpened factionalism in the rural areas. Factions led mainly by well-to-do farmers competed for the loyalty of the rural poor, who were able to get at least some of their demands met in return. It was during this period that in several villages the scheduled castes were able to gain some social recognition — in terms of water-lifting from community wells or bathing in village ponds where earlier only caste Hindus and animals were permitted, or integrated seating arrangements for Bhil and Chamar boys in village schools, etc.

In this way also a poor man could change his employer-cum-moneylender. He did this if the new employer (i) helped him to repay the amount owed to the previous lender, (ii) gave him some relief in interest, etc, and (iii) fixed a higher wage for him as attached labour. Interviews with 23 attached labourers from three villages in Jayal tehsil in Nagaur district revealed that most of them had been able to change their employers quite frequently and that they had not been quite bonded labourers (see Table).

Despite these favourable circumstances the rural poor did not form any organisation to further their interests in times to come. Their gains were the fall-out of the competition among the rich and not the outcome of their own struggles or class solidarity. This very lack of an organisation has now become a major stumbling block now when the poor are unable to benefit from the more favourable laws.

Ironically, with the commencement of the new law about bonded labour, the relative freedom of the poor described above seems to have become inoperative. The rich farmers' factional quarrels have partly subsided, at least for the time being. In rich farmers' view, the attached labourers are no longer attractive commodities for their competition. As some of them put it, an attached labourer's leaving of one employer or moneylender is now considered to be a step against the whole moneylender/employer class. Indeed, during 1975-76, almost no attached labourer could change his employer (see Table). And, while the attached labourers indicated full awareness of the new laws, they reported that at least some rich people's active support is essential if they are to take advantage of these laws. Where earlier one faction or the other of the rich farmers helped the poor to repay loans or interest charges to win their allegiance, today the rich farmers help

each other to recover past loans and refrain from giving further credit in cash or kind. In fact, despite the new law the average repayment of debt by the attached labourers interviewed was the highest during 1975-76 (see Table). And this happened mostly through the acquisition of the debtor's animals by the creditor, since unlike in the case of land there is no restriction on acquiring the poor man's livestock.

While the recovery of private loans from the poor — using all fair and foul means, except going to the court — has gone apace, new credit transactions have come to a standstill. Shopkeepers do not give anything on credit to the poor. Tractor-owners do not operate custom hire services on deferred payment basis for the small and medium farmers — so much so that despite the good rains in 1975-76 one-fourth to a half of the lands of these farmers has

remained fallow. Over the last 10 years deferred payment of tractor charges and tractor cultivation on hire basis had become very popular among small farmers and a majority of them had stopped keeping bullocks. This year the whole system has come to an abrupt end, adversely affecting the poor.

Co-operatives could have helped in the circumstances, but the movement is far from developed in this area. In most villages, primary co-operatives are non-existent or defunct. And near-forcible recovery of old dues in some villages has further scared the poor from taking co-operative loans. This year Rs 32 crores out of Rs 62 crores of past overdues have been recovered. Flying squads, assisted by the police, have been deployed all over the state. All this has further pushed the poor towards moneylenders and compelled them to be more 'loyal' to employers and to 'behave'.

## UNITED KINGDOM

# Blacks Defend Themselves

Farrukh Dhondy

THE killing of Gurdip Singh Chaggar, a eighteen year old youth in Southall, the killing of two Asian students on the streets of Woodford, the murder of a Bengali in Bradford, and numerous other stabbings, beatings, fire-bombings and assaults on the Asian community, have precipitated this month the strongest reaction to date from the black community of Britain. In Southall, in East London, in Bradford, in Blackburn, in Birmingham, in all the industrial centres which are areas of immigrant concentration, a new force is in the process of being born. The children of first generation immigrants are forming themselves into an organised force in resistance to British racism; they present, through their defensive activity, a perspective which rejects the forbearance and passive stance that their parents' generation has taken on 'race relations'.

The present wave of racism, not concentrated by any means in the organisations of the fascist right, was set off by a conflict which has been going on for some time, behind closed doors, in the British government itself. Earlier this year, the faction of civil servants, politicians, and immigration officials who have fought a battle within the Home Ministry for the reduction of immigration quotas, decided to muster public reaction in their support. Knowing full well the implications of their

act, the civil servants of the Home Office leaked the 'Hawley Report' a confidential document, to the press and to their chief parliamentary populist, Enoch Powell. Powell used the report to launch another hysterical warning to the nation. The question of the presence of black people, especially Asians, in British cities, would be "settled by the injection of guns and explosives into the communities", he said. He used the Hawley report to allege that thousands of immigrants from India, Pakistan and Bangladesh were dodging immigration procedures by providing themselves with forged documents to prove their relationship and dependence on workers already here. These allegations of fraud went together with typical Powellite forewarnings of the flood of Asians clamouring to reach these shores from Malawi and other countries in Africa. In effect, his speech, and the publicity which followed it, was a call to British racists to take the law into their own hands and begin, as the National Front and the National Party have done, to campaign through agitation and more direct action, for the repatriation of blacks from Britain.

In support of Powell, the two main fascist parties, the Front and the Nationalists, took out flag-waving demonstrations on the streets of Birmingham, Bradford, London, Blackburn, Stafford



and Rotherham. Their organisers chose Birmingham and Stafford because at present, through conspiracy, connivance or inefficiency and lack of foresight, the Race Relations Board of British has given the fascist movement a martyr in the person of Robert Relf, now imprisoned in Stafford for refusing to take down a sign outside his house which advertised the house for sale to 'whites only'. Fifty-one year old Relf was first put into Birmingham prison for an indefinite term, not for the advertisement itself, an act which carries no legal penalty, but for contempt of the court which ordered its removal.

The National Front's demonstration outside Winson Green Prison in Birmingham, where Relf was first held, was countered by a demonstration of Asian and West Indian workers, supported by a few people from the trade unions and other white organisations. The police, as always, acted as a shield for the National Front assembly, whose slogans went from demands to free Relf, to straight racist abuse like "Get the Pakis out" and so on. Following the considerable uproar over the demonstration, and the arrest of twenty-five of the counter demonstrators, the Home Secretary decided to shift Relf to Stafford a town in which the immigrant population doesn't have a retaliatory force, and where the National Front held a subsequent propaganda march, unhampered by the presence of opposing black workers.

The other focus of attention which the National Front and the National Party have exploited, is the threatened settlement of Malawi Asians in Britain. In late May two Malawian families arrived at Gatwick airport, exercising their right as British citizens to be in Britain. Their arrival was publicised through screaming headlines. The local authority in charge of finding them a place to live for a few days till they made their own arrangements, bungled the affair by putting both families in a four-star hotel. The newspapers were full of it: 'Malawi Asians Move into £ 600 a Week Hotel'. These headlines were followed by horror stories of the 40,000 Asians still entitled, by virtue of holding British passports, to enter the country. In actual fact, there are approximately 150,000 British nationals entitled to enter the country from places such as Rhodesia, but being white, their impending or prospective arrival gets no attention in the press.

The campaigns of the two fascist organisations on the repatriation of im-

migrants this year have transformed the parties themselves, making them a credible force in British politics. They already have several elected councillors in positions of authority in the local government and are now heading for by-election campaigns and have a full-fledged parliamentary ticket in the next election. Their ranks have been swollen by defecting Conservatives who see racialism as a lever of power in the country. Anthony Reed Hebert, the Chairman of the National Front in Leicester, and Chairman of the East Midlands region is former member of the conservative party. He spells out the perspectives of the present Front campaign: "We want to effect the repatriation of all non-Caucasian immigrants through a mixture of stick-and-carrot tactics. If the Asians will not take the initial incentive offered to go away, we shall have to start removing, progressively, their rights. If bloodshed and racial strife is the result, then all I can say is that it is an acceptable price to pay for clearing out the immigrants".

When this sort of racism is echoed in meetings of local tenants associations, some union branches, special meetings and conventions called by the fascists, and in the pages of the local and na-

tional newspapers, it draws its strength from a reservoir of frustration and latent racism in the British working class. Such a call to arms has produced, in the last months, numerous assaults and injuries to the black population. Gangs of youth, not necessarily enlisted in the ranks of the Front or the National Party, roam the streets unchecked by the police, carrying weapons and making random assaults on blacks who happen to be on the street.

To this assault the Asian Community has responded in a way in which it hasn't responded before. The racists have issued a challenge and that challenge has been met by the organisation of several Asian communities, led by their young. The Asian youth of Southall, of Whitechapel, of Blackburn, of Bradford, of Birmingham, of any city in Britain with an appreciable settlement of blacks, have used the occasion to feel and field their public strength. But these efforts have met with inertia and opposition from other interests within the Asian community itself. As yet the access of these new efforts at organisation to community power is far from assured, but the story of the rise of this organisation and power is today the seminal story of the Asian community in Britain.

## SOUTHEAST ASIA

### Thailand-Malaysia Tensions

Harish Chandola

A DEEP, solid barrier of primeval forest stands along the entire 100-mile Malaysia-Thailand border. Man has encroached upon it in many ways; but his encroachments have resulted in only the carving out of a fringe of small rubber plantations and a few tobacco fields along the northern and southern edges of the forest. Outwardly, the forest is forbidding. Inside, it is vibrant with life, and not only with the life of wild animals. There are bands of highly organised and disciplined human beings inside it. The forest covers and protects innumerable camps of one of the oldest communist parties of Asia, the banned, 46-year old Communist Party of Malaya (CPM), which led a heroic resistance against the Japanese occupation during the Second World War, and which had conducted, what some describe, as a somewhat adventuristic armed struggle against the British forces that returned to Malaya after the war. In that 12-year struggle, taking advantage of the racial composition of the

country (whose population is about 47 per cent Malay, 42 per cent Chinese and 10 per cent Indians), the British managed to isolate the then largely Chinese CPM, and drive its depleted forces all the way up north, to the Thai border, where the forest gave them shelter and sustenance. It is from this forest sanctuary that the CPM has now launched the third stage of its struggle.

This spring there was great excitement around this sensitive border. Waves of this excitement reached far, to Bangkok in the north and to Kuala Lumpur in the south, and even beyond, to capitals that felt concerned about the security of the present political and economic system in Malaysia, once again threatened by the increased activity of the CPM.

In accordance with a 12-year old border agreement with Thailand on joint measures to fight the Communist insurgents, the government of Malaysia had stationed about 500 men of its para-military police field force in the



Thai town of Betong, just across the border. On April 17, the Malaysian forces unilaterally conducted certain operations in Thai territory along that border, including bombing raids, which damaged the property of Thai villagers. (According to the Malaysian government, only a few rubber trees were destroyed in the bombing raids, but the Thai villagers claim that the damage was far more extensive.) This event has brought to surface the resentment of the Thai nationals in Betong area towards the Malaysian troops stationed in their country. To protest against the Malaysian military presence and actions, they staged large demonstrations (often 10,000 strong, which included almost all the people of the sparsely-populated area) for several days continuously, until the Thai government took note of the protest and sent a Minister down to hear the grievances of the people there against the Malaysian soldiers.

The presence of Malaysian troops in Betong has brought to focus the sensitive issue of the presence of foreign troops on Thai soil. The Thai people, who had vigorously protested for almost three years for the ouster of American troops from their country, could not possibly accept the presence of other foreign forces on their soil, even if the other forces did not belong to an imperialist power and were instead those of a neighbour. The issue was also threatening the political stability of the newly-elected coalition government in Thailand. There were political elements in the country who had begun asking whether it was true that Thailand had to have Malaysian troops in the south because it was unable to deal with the problem by itself. And so, at the risk of seriously upsetting the Malaysian government, on June 4 the Thai government asked Malaysia to withdraw its para-military forces from Betong within four days.

The Thai demand has enraged Malaysia no end. Its leaders have hinted that Thailand is not interested in fighting the communist forces because it knows that those forces posed a danger mainly to Malaysia. After the withdrawal, which was completed on June 6, the Malaysian Home Affairs Minister, Ghazali Shafie, said that Malaysia would consider Betong a hostile area and would not be responsible for the consequences of the withdrawal of the Malaysian troops from there, a statement promptly described by a group of Thai MPs as hostile to Thailand. Relations between Malaysia and Thailand, never very good, have considerably deteriorat-

ed since then, in spite of the fact that both of them belong to the Association of Southeast Asian Nations (ASEAN), which aims at developing closer economic, political and cultural relations among its five members (the others are Singapore, Indonesia and the Philippines).

The Thais have stated that they want to review the 12-year old border agreement with Malaysia. A draft of the revised agreement has already been sent to the Malaysian government. In that draft, it is learnt, the Thais have made it clear that communist activity is not the only threat along their common border. They have said that Muslim separatists of Malay race, wanting to establish a separate state of Pattani composed of four southern provinces of Thailand (Satun, Pattani, Yala and Narathiwat) are posing a serious law and order problem along that common border. The Thais also maintain that there are religious and other powerful elements in Malaysia, particularly in its border state of Kelantan, who are aiding these Thai Muslim separatist elements. The separatist leaders visit Malaysia frequently. Thailand has therefore suggested, it is understood, that the two countries have not only to jointly suppress communists but also the Muslim separatists along that frontier. The right of hot pursuit which the border agreement gave to the Malaysian troops has also to be amended. According to the present agreement, the Malaysian troops can pursue communists to a depth of five miles inside the Thai territory. The Thais, it is learnt, now want a similar facility for their forces to pursue separatist elements into Malaysia.

The Thais have also raised other problems that exist along that border. Smuggling is big business along the border and traders on both sides are involved in it. Thailand wants the Malaysian authorities to be more strict in curbing smuggling. The Thai authorities also feel that hard drugs are smuggled out through that border where the traders have great influence over officials who are supposed to stop smuggling.

Malaysia, it is learnt, has not taken kindly to the bringing up of all these issues. It feels that the two countries must agree on priorities for joint actions, and to Malaysia, the number one priority is the suppression of the Communist Party of Malaya and its forces. Thailand agrees with Malaysia, but feels that other border problems must also be taken into account and tackled simultaneously, like the problems strictly. Thai trucks, taxis and ing, which adversely affects life in southern Thailand.

It is not clear when a new border agreement will be signed. Meanwhile tension between the two countries grows; the border is now virtually closed for transit and trade, because both sides have started implementing their laws strictly. Thai trucks, taxis and other vehicles, which carried most of the border trade, are now not permitted to enter Malaysia without a separate insurance cover for coming into Malaysia; the Thai drivers whose Thai driving licences were recognised before are not allowed in without international driving licences. To top it all, the Thai Prime Minister, Seni Pramoj, who was to visit Malaysia on June 20, had postponed his visit.

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## RELEVANT TECHNOLOGY

Following is the speech delivered by Mr T Thomas, Chairman, at the Annual General Meeting of Hindustan Lever Limited, held at Bombay on Thursday, 24th June, 1976.

### INTRODUCTION

India is reaching a stage of criticality in its technological momentum. Therefore, I thought it would be appropriate to examine what kind of technology would be relevant to our country and what contribution your Company is making to such relevant technology. A historic perspective has been provided in order to make the analysis more meaningful.

### SCIENCE & TECHNOLOGY

Although science and technology are closely interlinked, there is a clear distinction between them. While science provides the 'Know-how', technology provides the 'Know-how'.

Science can exist and has done so in the past for long periods (e.g. atomic science) without being converted into technology. Similarly, once upon a time technology was derived directly from arts and crafts (e.g. distillation or metallurgy) without any understanding of the science behind it. But over the centuries, a strong linkage has been established between science and technology. And modern technology is the result of deliberate application of science.

Today an organisation can progress in technology only if it has a base in science (i.e. R & D). Conversely, the only way science can tangibly influence or benefit society is through its conversion into technology which is relevant to the needs of society.

### TECHNOLOGY & ECONOMIC DEVELOPMENT

Throughout history, economic development has depended on technological progress which passed almost like a wave over the countries from East to West — from China, India and Egypt to Greece and Rome, later to the Islamic Empire and to Renaissance Italy and culminating in the Industrial Revolution in Europe spearheaded by

Britain. In all this the trail of economic progress was identical to that of science and technology.

Perhaps man's first technological step was to take up organised cultivation of desirable crops which we now call 'agriculture'. This momentous step was taken because of the crisis reached in the early man's parasitical hunting economy as animals vanished or were exhausted from within reasonable reach. Similarly, throughout history, a large number of technological innovations were created in response to that recurring crisis of organised violence which we call 'war'. Yet another type of crisis which contributed to technological progress was the force of deprivation. A telling example was the discovery and use of coal in Britain in the eighteenth century because of the increasing shortage and cost of wood as a fuel. This led to mining and usage of coal which in turn resulted in a revolution in the engineering and metallurgical industries.

Thus, in the past, economic progress through technology was as a result of some kind of crisis. But in the present century planned use of science and technology for economic development has taken place in both the capitalistic as well as the socialistic societies. Science and technology have now become the recognised instrument for economic development.

### CONTROL & USE OF TECHNOLOGY

The effectiveness of technology depends very much on who controls and uses it. In early human civilisations from China to Peru, the intellectual priests and the rulers believed that proper contact with celestial powers was more important than terrestrial problems. Hence the emphasis was on the study of stars or on the building of pyramids and temples to propitiate the gods. Although these beliefs and activities stimulated science and technology (e.g. astronomy, architecture), they did not contribute much to the well-being of people. In a later civilisation, the Greeks made tremendous progress in logic, mathematics, philosophy and architecture. But most of it found little application in simple

activities like agriculture which were relevant to the welfare of the people.

Over the centuries the sponsorship and control of science and technology passed from the hands of private geniuses and princely patrons — first into the hands of people motivated by commercial interests (i.e. business and industry) and later (especially in this century) into the hands of governments. This evolution in the control of science and technology into the hands of agencies with increasing social responsibility should normally be considered an advantage.

Unfortunately, one of the major interests of governments (and hence of many large manufacturers) in technology and science in the most developed countries, has been its use for Defence. It has been reported that only about half of total R & D in advanced countries is directed towards purely non-Defence purposes. A major portion of today's scientific resources is devoted to the pursuit of organised violence between States which seem to emerge into a stage of adolescence and have to prove their virility in this suicidal fashion before they almost inevitably decline in the way of the Greeks and the Romans. In fact, if in a later century, a retrospective view were to be taken about the distribution of scientific and technological endeavour during our times, there could be a strong indictment of the present civilisation.

However, in spite of this diversion of significant effort to Defence purposes, the relevance of science and technology to the well-being of larger sections of society has come to be recognised increasingly because all governments are ultimately accountable for economic progress and not merely for Defence. It is this factor of 'accountability', that often compels organisations as well as individuals to become more relevant.

### TECHNOLOGY IN INDIA GOES 'CRITICAL'

Against such a historic perspective, I believe that our country is fast approaching, if it has not already reached, a point of criticality in the advancement of science and technology in the



same manner as chemicals reach a critical point in their reactive transformation. My belief is based on the following factors:

Throughout history India has preserved an intellectual class that was interested in sciences such as astronomy, astrology, mathematics, architecture, yoga, ayurveda and metaphysics. We have thus sustained an intellectual base.

We have a political system which owes its existence and will owe its survival to the well-being of the largest proportion of people in the country. It cannot be preserved either by enriching a few or by territorial acquisitions. It is therefore bound to seek economic development which has inevitably to be based on technology that is relevant for this purpose.

In independent India of the 20th century, we have been fortunate in having, in both Pandit Nehru and Smt. Indira Gandhi, Prime Ministers who at the highest political level have recognised the role of science and technology in economic development.

Science and technology being agents of change are radical in nature. India is in a ferment of change — change even in age-old social customs like dowry or the size of families. This radicalism provides an effective climate for advancement of technology.

If historically crises have often contributed to advancement of technology as was described earlier, we have one of the most potent crises on hand — the crisis of deprivation of at least 250 million people, not merely of firewood as it was in Britain of the 18th century, but of more basic necessities like food, clothing and shelter. It will compel us to find solutions in technology and that too in the none too distant future.

Fortunately for us, scientific knowledge and technology are cumulative and not exhaustible. During the last half century there has been a greater accumulation of technology than has taken place in the whole of the previous period of human civilisation. This has created a powerful potential force for flow of proven technology into our country.

In the same period, our country has built up the world's third largest force of scientists and technologists. As against 67,000 science graduates and 53,000 engineers in 1950, today India has over half a million science graduates and nearly half a million engineers. Even if one were to apply a factor for discounting the quality of some of these numbers, it is still a very im-

pressive growth and a formidable number. It is also estimated that by 1985 our number of scientists and engineers will exceed 2 million which would be more than what several developed countries will have by 1985.

Instead of being confined only to elite universities, the study of science and technology has spread throughout the country. Coupled with improved means of communication, this has made science and technology more familiar to people at large and their usefulness is being increasingly realised even in the farming communities. Thus we have attained a level of receptivity for technology which did not exist even in many developed countries at a corresponding stage of their economic development.

India has now an industrial base to employ and to exploit the findings of scientists and technologists. The private sector has passed from the age of the trader-investor, who through hereditary management tried to obtain the fastest return, to a new class of professionals who are willing to invest in the future through R & D. The public sector is being increasingly weaned from the civil service umbilical cords and managed by people who have greater involvement and knowledge of the technology. All these changes must contribute to a greater and more rapid mastery and exploitation of technology for advancement.

The versatility of technology available in the country has expanded considerably in the last 25 years. In that period, we have acquired and successfully absorbed modern technology for steel, fertilizer, non-ferrous metals, machine building and heavy engineering. We have broken into petrochemicals and atomic power.

For all these reasons I believe that India is on the threshold of great advancement.

### RELEVANCE OF TECHNOLOGY

In this context, what should be the most appropriate test of relevance to be applied to technology for India today? Is it the ability to catch up in sophistication of products? Is it the production of better armaments, faster vehicles or bigger buildings? Perhaps only some of these, and certainly many others, are necessary. But the most relevant need in our country today is economic development, especially of the less privileged sections mostly located in rural areas.

There is a tendency to overrate technology merely because it produces something new or sophisticated or because it is imported. Much of the technology that is relevant to our current economic development will have to be for the production of more basic and therefore apparently simple products like foodgrains, edible fats, low cost housing, etc. Just because the end product looks simple, the technology need not be considered less sophisticated. Very often the technology for such basic needs cannot be imported and has to be developed indigenously. Therefore, such technology tends to be devoid of the label 'imported' which is almost synonymous with 'sophisticated'. We must learn to value technology more for its relevance to our basic needs than for any labels.

With that as the touchstone for grading technology, we should not be concerned so much with the complexity of any technology as with its potential to contribute to basic economic development.

It is also necessary to draw a distinction between what is spectacular and what is relevant. When ancient astronomers predicted the movement of stars or modern technology placed a man on the moon, it was spectacular. Popular opinion is most impressed by such spectacular feats of science and technology. But often the spectacular is not relevant to the generation that is impressed. They become relevant, only to the extent of, and only when, consequences from such feats benefit a sizeable part of population. And this usually takes a long time. For instance, the study of astronomy had over a period of time benefited early man in his planning of agriculture as it could indicate the periodic change in weather. Perhaps one day when the earth is overpopulated or new resources have to be imported from other planets, the space technology of today may have more direct relevance to the common man. The spectacular feats have to be thus converted into relevant technology before they become useful.

In the intervening period, in addition to spectacular achievements, each country has to try and develop what is currently relevant to its needs because all of us live in the short term. And the poorer a man or a nation is, the shorter is the available time horizon whether it is for planning or for reaching the end of one's tether.



## EXAMPLES OF RELEVANT TECHNOLOGY

It will now be interesting to formulate some examples of technology that would be relevant to India. Over 70 per cent of our population lives in rural areas and are engaged in agriculture. About 50 per cent of our GNP is derived from agriculture. Therefore, anything that would improve agriculture would be at the top in any ranking by relevance.

Agriculture starts with the preparation of soil. Of course, everybody knows that it is best done by modern mechanical implements and a tractor. But how many farmers in India can afford to buy a tractor costing Rs 60,000 and then to run it. It is no wonder that we have only about 300,000 tractors in the whole country. Therefore, to seek a solution exclusively through such advanced technology has only limited relevance in our country today. Let us, therefore, consider how the present system of preparing the soil by using bullocks and the plough can be improved. Is there a way of improving the tractive power of the bullock? An innovation which revolutionised agriculture in medieval Europe (in the eleventh century) was the adoption of a horse collar instead of a band across its breast. The band used to constrict the horse's windpipe whereas the collar pulling on the horse's shoulders did not create such a disadvantage. The result was a five-fold increase in tractive effort of the horse. Will it not be very relevant for one of our Institutes of Technology to study the problem of improving the efficiency of ploughing with bullocks or buffaloes?

Another area of great importance is the provision of improved seeds which can improve productivity of agriculture. Although very commendable work has been done in wheat, cotton and even castor seeds, there are very important crops still neglected, e.g. oilseeds.

Yet another facet of agriculture is the use of agricultural and forest waste. The production and use of gobar gas is an example of this. But the biggest product of agriculture is the cellulosic material it creates in very much larger quantity than the millions of tonnes of cereals and pulses. After all, cellulose is not chemically very different from carbohydrates. Can a technology be evolved to upgrade it for human or more effective animal nutrition?

The whole field of water manage-

ment for agriculture is something that agricultural scientists alone cannot tackle. Are we attracting enough civil, mechanical and chemical engineers to evolve new technology for (a) conserving water, and (b) more economic utilisation of water?

These are a few examples (necessarily somewhat speculative) which could illustrate what could constitute "relevant technology" for India. But to pursue such relevant technology, it is necessary to engage and attract a large proportion of our new generation of scientists and technologists away from the spectacular and the seemingly sophisticated to the relevant. Will it not be more relevant for a larger proportion of our young engineers to work on problems of agriculture than on computer technology? Of course, the country needs both but perhaps more of the former. Yet, at present, our young technologists seem to be more attracted to the latter. What seem to attract them to such glamorous areas of technology are the monetary rewards and the professional recognition that are more readily obtained in those areas. Therefore, it is very necessary to make the rewards and satisfaction more attractive in the more relevant areas. For the cumulative effect of a larger number of even minor improvements in agriculture, transport, mining and production of basic goods can be far more important to our economy than occasional dramatic feats in highly advanced technologies.

## OUR CONTRIBUTION TO RELEVANT TECHNOLOGY

### Responsive Evolution of the Company

Your Company has evolved over the decades and has responded to this era of technology and science. This Company started in the last century as a trading company, which imported and sold goods through agents. Later on it became a marketing company with managers who were engaged to find out what the consumer needed and to serve the market accordingly. The next stage was for us to become a manufacturing company. This led to a mastery of technology involved in our manufacturing operations and a widening of the technological base. And the most recent stage in this evolutionary process has been our investment in science, i.e. R & D in the last 20 years. This has provided more basic understanding and thereby further enriched the technologi-

cal base, and its relevance to the needs in India.

There has also been a corresponding change in the composition of the Company's management team. Today more than 50 per cent of our managers are scientists and technologists and it is no accident that three out of the four Chairmen appointed in the recent past have been technologists. This responsive evolution of the Company has enabled it to make contributions in science and technology related to the areas of our business.

### Examples of our Contribution

Let me now give you some examples of relevant technology that has been developed and used or is in the process of development, as a result of our investment in science and technology.

#### Oils & Fats

Our major area of expertise and interest — one flows from the other — is that of oils and fats. As a result of almost 15 years of R & D work, we have obtained an insight into the chemistry of most of the oils and fats available in India and have developed original plant-scale processes to upgrade unconventional oils for use in consumer products.

(i) Let us take the example of castor oil. Scientists have known the fatty acid composition of castor oil for many decades and the fact that ricinoleic acid in castor oil causes undesirable properties if used in soap making. Therefore, castor oil, although nonedible and available in large quantities (almost 100,000 tonnes per annum could be used and is still used by most other soap manufacturers only in a very low proportion in soap making. Higher usage causes problems both in processing the soap and in the quality of soap in usage by the consumer.

Yet, higher levels of usage of castor oil in soap making would not only release from soap making a corresponding quantity of possibly edible oils, but also provide a more steady and better value for castor which is cultivated mostly by marginal farmers. As India is a fat-short economy, it would also result in saving import of oils.

These considerations led us to examine castor oil more closely. While the concept of dehydroxylation of castor oil had been known widely, we developed for the first time the optimum conditions for plant-scale dehydroxylation in such a manner as to



render the processed triglyceride suitable for increased usage in soap making. This process has been patented by us. In actual plant operations, further improvements have been made and as a result, today we are in a position to use about 20,000 tonnes per annum of processed triglycerides from castor oil. We are now working on further improvements in technology, e.g., vapour phase reaction to improve efficiency and to provide a still better quality product.

(ii) Or take the case of sal fat. When a forest contractor from Orissa approached us several years ago with a small quantity of sal seed, it was known that it had sal fat which had a very greenish colour but could be used in the manufacture of certain grades of soap. So we encouraged him to collect and supply the seed for extraction. The sal tree sheds its seeds in the forests of Orissa, Madhya Pradesh and Uttar Pradesh, in a few weeks before the monsoon. The collection and usage of sal seeds have a greater relevance as it provides productive employment and income (*albeit* seasonally) to a large number of the most underprivileged people in our country.

It was known that sal fat has a triglyceride configuration which could impart quality characteristics similar to cocoa butter which is very expensive and is essential for the manufacture of chocolates. But this knowledge had to be translated into technology which could upgrade the crude fat into an acceptable triglyceride. We have succeeded in doing so through fractional crystallisation and in finding a market for it among the chocolate makers of the world. The process is now in plant-scale operation and in 1975 we exported 2,200 tonnes to earn foreign exchange of Rs. 4 crores. But still there are areas of ignorance around the chemistry of sal fat. We still do not know the trace impurities that seem to cause considerable variation in the user characteristics of the end product. Is it caused by something in the different species or in the soils? Does it happen during storage or extraction? R & D work continues.

#### Nutrition & Biology

Because of our involvement with foods, we have developed over the years a R & D nucleus in biological sciences. An area of great interest to

us is human and animal nutrition—both of which are of considerable relevance in our country.

(i) A significant contribution was made by us in the formulation of an economic but nutritionally balanced diet for the 'Sukhadi' programme operated during the famine of 1972 in Maharashtra. Our R & D laboratory evolved the formulation which was freely given to and adopted by the relief agency operated by Maharashtra Government through Sadguru Seva Sangh. It was a very gratifying example of how R & D in the private sector could contribute to public programmes for alleviation of suffering.

(ii) In the field of animal nutrition it is now possible to observe and analyse the process of rumination and digestion in a live animal by a new method of fistulation. This enables scientists to understand more fully how a goat or buffalo derives its nutrition from different materials it consumes and how these materials undergo changes during the period of their being processed in the ruminant's stomach. Such a scientific understanding will lead to better formulation and nutrition.

(iii) Another very different but interesting piece of biological work our scientists have completed is with regard to prawn farming. Instead of having to harvest the prawns from the sea, can we grow them in ponds in the wasteland near the sea or inland? This could make considerable difference to the fortunes of the fisherfolk who have an uncertain source of income. Selection of variety, formulation of special feed, optimisation of conditions for growth etc, were areas of research. As a result, we have evolved a process for prawn farming which is ready for large-scale trials. Since we are not in a position to exploit it commercially, this technology is available for exploitation by more suitable agencies.

(iv) Complementary to our work on oils and fats and because of our involvement in the area of animal nutrition, we have developed technology for detoxification of several conventional and unconventional oil cakes. For example, Indian groundnut extractions are at a discount in the export market (mainly Western Europe) because of the possible presence of a toxin called aflatoxin. Cottonseed extractions cannot be used in significant quantities in feeds for non-ruminant

animals because of the toxin gossypol present in it. Sal extraction has tannin as a toxic element in it. We have now developed processes for detoxification of all these. Our scientists are working on detoxification of even one of the more difficult cakes, namely castor cake. We believe that blessed with a significant amount of sunshine which is the source of all photosynthesis, India has the potential to be a supplier of protein to the world — provided we can develop technology to process and upgrade our proteins.

#### Toxicology

This is a branch of science and technology which is new to our country except in the pharmaceutical and medical world. But as we are using increasingly more indigenous unconventional materials, it is necessary to undertake toxicological testing to determine the safety of these materials in actual use. For example, before raw or processed sal extraction was used in cattle or poultry feed it was necessary to determine the toxicological effects and safety limits. Several new techniques in toxicology have been introduced and adapted by our scientists for such testing.

#### Agriculture

A major part of our business is based on agricultural products — oils and fats, oil cakes, etc. We know that it is essential to raise the production of oil-seeds in India. In addition to funding extension work on groundnuts through the Vanaspati Manufacturers' Association, we have now directly undertaken research in sunflower which we think holds significant promise in this country as it did in USSR, Eastern Europe, Turkey and lately in Pakistan. The major problem with regard to sunflower is the evolution of a suitable variety for India. We have initiated varietal trials and breeding by our own agricultural scientists. Can we get a sunflower that will droop and prevent picking of seeds by birds? Can we get more drought resistance? Which variety will give more yield? We are seeking answers to these and similar questions. Although we are not going to be directly involved in agriculture, we hope to make effective use of our findings through universities and extension work. The experience we had gained in upgrading the variety of peas (from desi to Bournville) in



Western U. P. in the sixties and from the extension work with essential oil plants in U. P. Assam and South India is now proving useful in this new effort.

### Chemicals

We are makers of chemicals — catalysts, fine chemicals, oleo-chemicals — and in future, heavy chemicals.

(i) A significant contribution has been in the manufacture of Nickel Catalyst for hydrogenation. In addition to providing an improved variety of catalyst through R & D, 80 per cent of nickel requirements can be met from recycled material thereby effecting significant saving in imports.

(ii) Our Fine Chemicals manufacture receives considerable backing from R & D. We have evolved processes for as many as 20 chemicals in the last few years. In one of them the technology is available only with two other parties in the world. We have already agreed to sell this technology to another party in India.

(iii) R & D of even greater relevance but in a somewhat longer time span is our attempt to use microbiology for production of chemicals. One of the most significant advances in science in recent years has been the understanding of biology at the molecular level. This enables us to manipulate bacteria and use them for specific purposes. We have already succeeded in producing glycerol from molasses biochemically at twice the concentrations reported in previously published work. We are now working on biochemical conversion of an agricultural waste into a chemical which could revolutionise a common household product. These are bordering on the speculative, whose relevance may be only in the future. But in the meantime we have developed a very sound base in the understanding of mutation of micro organisms, the technology of fermentation and all the allied scientific and technical problems and a capability in the emerging field of biochemical processes.

### Process Technology & Equipment

A very important area which is somewhat neglected in our country is that of process technology. All R & D does not have to begin with the fundamentals of science. A very rewarding base for R & D is existing processes in established industries. It

has a great deal of relevance in India because of the following reasons:

(a) Engineering technology in India has advanced considerably in the last 20 years and therefore it is possible to undertake R & D in process technology.

(b) Process efficiency has to be optimised with reference to consumption of materials, quality of product, cost of equipment, usage of labour and energy. The balance of these factors are in many cases different in India as compared to more developed countries. Therefore, the technology relevant to us could be different and has to be developed and assessed locally.

(i) Take, for example, the extraction of glycerol from soap. Through R & D we have been able to develop a technology which is unique in India and which does not require high speed centrifuging (involving imported equipment and high power consumption) and yet extracts the glycerine with high efficiency. It takes a little more space and labour both of which are cheaper in India than equipment or energy.

(ii) Or take the manufacture of synthetic detergents. We have by now developed the technology for manufacture of all the equipment required for sulphonation, high pressure blowing, airheater, control panels etc, so that the entire plant can be indigenous. And there are many other examples of developing process technology and equipments more relevant to our needs.

### MANAGEMENT OF SCIENCE

In the old days, scientists, like artists, had to be left almost entirely to be guided by their inspirations. Most scientific work centred around individuals. These characteristics still persist in academic science.

However, for the successful application of science and technology to industrial and economic development, the effort has to be managed. First of all, there has to be an agreed set of objectives for R & D work. Secondly, those who are responsible for sponsoring the work as well as the scientists who carry out the work have to accept the discipline of accountability. Thirdly, most scientific work today has to be conducted as team work involving inter-disciplinary effort which in turn has to be dovetailed to economic objectives. All these call for management of science.

In fact, in the absence of such man-

agement of science, frustrations can arise among scientists because of (a) lack of direction and purpose for their work; (b) the absence of accountability either to evaluate or to utilise their findings; and (c) the absence of linkage with, and feed back from, end-users of their technology. The scientist and technologist need direction, recognition, reward and restraints like all other managers do. These can be provided through the well-understood principles of management. This is necessary to make science and technology relevant to agreed objectives.

Your Company has acquired some valuable experience in the management of science. We have instituted a system of Projects Planning and Monitoring. A major part of R & D work consists of projects each of which has been discussed and agreed with the relevant operating management group in the Company, which is responsible both to provide the funds for the work, as well as for utilising the results of the R & D work. Each project has an agreed set of objectives, an estimated cost, an expected time span for completion and an approximation of the chances of success. On the basis of these parameters the operating business group and the R & D group enter into a mutually accountable system of monitoring progress.

However, while the operating management are organised according to product groups, the R & D personnel are organised according to scientific disciplines. Any given project may require a combination of different scientific disciplines, e.g. Organic Chemistry, Surface Chemistry and Chemical Engineering. To reconcile these, a matrix form of management is used whereby scientists come together in inter-disciplinary project teams while still remaining as part of their respective disciplinary groups.

This system of managing science has resulted in (a) more purposeful results from R & D; (b) greater satisfaction and recognition for the scientists who can see all their work evaluated fairly and many of them adopted in practice; and (c) better appreciation and responsibility for R & D work among senior operating managers. In short, it has made R & D more relevant to the business.

However, we are conscious of the fact that in our anxiety to pursue what is relevant for today, it is necessary



to preserve and nurture the spirit of scientific exploration. Therefore, a portion of our R & D effort is left to the total discretion of the scientists and technologists without any immediate linkage with the operating business. This freedom to explore is vital for the scientist to preserve his skills and to seek excellence. Thus our management of science tries to achieve a blend of excellence as well as relevance.

## CONCLUSION

We are in the business of developing technology that is relevant to the

consumer — in the India of today and tomorrow; in the India of small towns and villages.

Relevance is dynamic; it changes with time. Therefore, whilst we should always apply the test of relevance to technology, we should also look ahead to see what might be relevant tomorrow. It might involve some projects that may appear to be speculative. Can we make synthetic fatty acids from petroleum and do so more economically than the Russians and the Japanese? Can we upgrade cottonseed protein to make it edible for human beings, thereby making available over

2 million tonnes per annum of protein source richer than wheat? Can we find out more about ageing of people — what causes their skin and their hair to age? Can we understand more clearly the way toxins work and create processes that will eliminate toxins from materials that can be used for animal nutrition? The answers to these and similar questions may provide some of the technology that will be relevant for the socially purposeful survival of your Company.

*Note: This does not purport to be a report of the proceedings of the Annual General Meeting.*

## REVIEWS

### Out of the Clinics and into the Fields

**Pills against Poverty: A Study of the Introduction of Western Medicine in a Tamil Village** by Goran Djurfeldt and Staffan Lindberg; Scandinavian Institute of Asian Studies, Monograph Series No 23, Studentslitteratur, Lund, and Curzon Press, London, 1975; pp 232; no price stated.

"SOMETIMES we get the feeling that the ordinary Harijan outwits all of us experts and knowalls. To quote one of our respondents:

"If you are rich, no sickness will come. Good living conditions, i.e., a good *pucca* house to live in, good sanitary conditions within and around the house, good food and medical care are essential for preventing disease. But we with our poverty, how could we manage those things?" (p 99.)

"Pills against Poverty" provides a very valuable critique of many attitudes and policies in the field of health services which have been taken for granted in India for far too long. The authors have done it by means of a sociology free from the depressing sins bequeathed by American teachers to many Indian sociologists: the book is easy to read, makes its points clearly and well, and does not rely on a simplistic use of questionnaire methodology. Instead, there is an intelligent use of contrasting methods — a census, interviews of a random sample, and anthropological fieldwork — and they bring to the analysis some of the more sophisticated developments of European sociology. This is a really *sociological* discussion, in a field where too many contributions are devoid of theoretical content. The book has its weaknesses, which should not be glossed over, but they do not detract from the substance of its achievement:

it says the right things in the right way, and is a welcome addition to the sociology of medicine which deserves to be read also by people outside this field.

The title is slightly misleading: the book does not deal with the *introduction* of Western medicine, which happened long ago, but with the situation in 1969-70 in a village just south of Madras. The authors were commissioned by SIDA, the Swedish aid agency, to evaluate an aid programme run by the Swallows, a Swedish voluntary agency. The material was intended to be useful to the project but the authors were in addition given complete freedom in publication. They have used this privileged position with some restraint, so that we do not get a very clear picture of the project, and many of the criticisms are implicit. In addition this book only reports on the health and family planning aspects of the study, yet relies upon data and arguments which appear in a companion volume ("Behind Poverty") or in some unpublished manuscripts. Readers without access to this material are thus left slightly in the dark on occasion.

The book concentrates on trying to answer two questions: how does poverty shape, influence and create the pattern of disease in the village? and why

does indigenous medicine survive? This is set in a context provided by three interrelated theses which the authors hope to establish by means of their case study. Firstly, that health is a function of the economic and political order. Secondly, that health problems "cannot be solved by means of medical technology". Thirdly, that "only a profound transformation of the economic and political structure can give the people of Thaiyur the means to improve their own health". These theses are supported by a variety of arguments, some familiar and some more original. The familiar arguments are those derived from Dubos and others that the extension of life expectancy and the decline in mortality in the West had far more to do with changes in social and economic conditions than with the development of medical technology. The more original elements are firstly, the integration of this with a 'development of underdevelopment' argument about the effects on health of the pauperisation in the periphery which accompanied Western capitalist development; and secondly the treatment of world-views, both of the authors themselves and of the villagers, by an attempted synthesis of Berger and Luckmann and of Althusser.

The major contention of the book — that India has relied upon a medical technology created at great cost in the West to try and cope with its health problems, and has achieved very little by this means, especially in rural areas — is well substantiated by their case study. In Thaiyur there is a better provision of medical services than is true



for most rural areas, because of the presence of the Swallows clinic and the proximity of Madras. The Swallows were spending a massive amount by Indian standards: Rs 24,000 a year on drugs and medicines for a population of 5,000 (outsiders were discouraged from attending) in 1970, against a Fifth Plan target of Rs 28,000 for a population of over 80,000 by 1978. Yet they were only handling about one-third of the illnesses defined by the villagers as serious, and the infant mortality and crude death rates were above all-India levels. Western medicine in Thaiyur is ineffective because there is a duplication of facilities; most of the health agencies concentrate on curative and not preventive work, and the preventive field is stifled by bureaucratic rigidities; and finally because health services can do nothing about malnutrition, poor hygiene and bad sanitation.

#### FORCES OF TRADITION

It is customary to lay most of the blame for poor nutrition, hygiene and sanitation on the shoulders of the 'irrational' peasants, and their continued use of vairs and religious healers is similarly ascribed to the forces of habit and tradition. By contrast, Djurfeldt and Lindberg argue that Indian peasants are as rational as anyone else in their attempts to understand their medical situation and to get the best possible medical care: most of their difficulties are due to their poverty, and "the persistence of the indigenous system ... and the reproduced cleavage of the medical system into two parts can be seen as a result of the inefficiency and irrationality of the allopathic one". The rationality of the peasant is demonstrated by attempts to "reconstruct the imagined concrete as it must appear to the people of Thaiyur". In spite of the considerable investments in the supposedly superior system of allopathic medical science, when it reaches the villager it does not appear to be very efficient. The percentage of patients cured (in the eyes of the villagers) by allopathic treatment is no higher than the percentages cured by vairs or by religious healers. These latter are successful not only because they refer the more difficult cases to the allopaths, who thereby take the blame for failures, but in addition they benefit from the placebo effect, from spontaneous recovery, and from the therapeutic power of their treatments, in the same

ways as the allopaths do.

It is thus hardly surprising that the villagers retain allegiance to a whole set of theories of disease causation and cure which, taken to their extremes, would be mutually inconsistent, but which can be applied differentially to situations deemed appropriate. Djurfeldt and Lindberg go so far as to argue that there is considerable stability in the current situation: they see no reason why the current division of labour between the different practitioners should be readily upset. This position is elaborated by an analysis of different levels of understanding of health and illness in the community. Commonsense provides a partial understanding of the part played by food, flies, water and work in the health of the villager, though because the methods available to commonsense are poor, the villager may, for example, mistake expensive food for more nutritious food. Nevertheless, commonsense does provide a basic conception of preventive mechanisms, mostly out of reach of the poor. The next layer of knowledge is medical-technical, held by specialists of various kinds. The link between these two levels is held in a social stock of 'recipe knowledge' — the knowledge of what to do, whom to consult, in any typical situation, like taking snake-bites to the snake-bite specialist. Individual knowledge gets transformed into socialised knowledge in a variety of ways. One which is discussed in some detail is through the concept of *rasi* (luck). Patients who have particular success with one healer may interpret this as meaning that they have *rasi* linking them to this specialist. In time this may become generalised if most patients who attend that healer get better, until it is accepted that this healer is good for all. Another way in which healers may acquire new followers is by shifts of allegiance — by the inculcation of a different way of seeing the medical world — which is happening to some extent through schooling, so that some young people are now believers in the germ theory of disease. The language of religious conversion is not inapplicable, for as soon as the realm of commonsense is left behind, all systems of medicine have to be taken on trust by the layman. Each has its failures, but each has its way of explaining them away. In the absence of a wonder drug or a wonder doctor, change is thus likely to be slow: since the tools of medical technology cannot deal with the pover-

ty that lies behind most illness in the village, allopathic medicine cannot provide this miraculous change.

Most of this analysis is powerful and persuasive, and most of my reservations would not affect the substantive conclusions. But there are weaknesses. I am not convinced that it is possible to combine an Althusserian epistemology (which claims superior status for its own understanding and for other 'scientific' views of the world) with approaches derived from Berger and Luckmann (who are far more agnostic about the claims of science). This means that the authors at one stage can be very cautious of the claims of medical science but at others can use them as a touchstone for whether or not indigenous understanding is correct. Again, some of the analysis could be improved by a use of some of the ideas of T S Kuhn, particularly as they relate to the ways in which systems of thought can be protected against apparent failures to explain, and in the ways in which one model of understanding the world is replaced by another.

#### ON WEAK GROUND

When the authors leave the areas of their own contribution they sometimes place themselves on very weak ground. The lack of expert demographic advice shows in some of the analysis of the census and in the section on family planning, and more systematic data on morbidity would have been welcome. When they argue that 'tropical' diseases became endemic and epidemic in 'tropical' areas only as a result of colonial conquest their only sources are African, though by implication the argument is applied to India also; and they do not confront the changes in the nature of colonialism and neo-colonialism which have permitted a considerable increase in life expectancy and reductions in mortality rates in India from 1900 onwards. It really is not enough to claim that illness in the last 15 years or so in India "must have" increased, because of the increase of poverty in that period, and to ignore the evidence (poor though it is) on mortality rates, which give no support to this point of view. Again, the section on a desirable medical policy is rather confused, partly because of their basic understanding that medical policy can do very little about health problems, and it seems



naive, in the light of what has gone before, to leave the details to 'medicine-men'. Surely a minimally necessary start is to stop looking to the doctor to solve problems basically nutritional or sanitational; to take the struggle for better health out of the clinics and into the fields.

## Self-Created Victims

Hari Sharan Chhabra

**Uganda Asians: The End of An Enterprise** by R R Ramchandani; United Asia Publications, Bombay, 1976; pp 318.

THIS is a scholarly publication on the role of the Asians in Uganda's economic development. The author has put in a good deal of work, and the book is based on primary sources gathered from the National Archives of India, Uganda National Archives, Makerere University Library, Central Council of Indian Associations of Kampala, Uganda Cotton Ginners Association, etc. Four maps and 49 tables dealing with the economic life of the Asians in Uganda add to the book's usefulness. Ramchandani discusses at length Indo-African relations through the ages and the role played by the early Indians in East African economy and trade. But one wishes the author had treated in greater detail the contribution made by Indian workers and technicians in the construction of the Kenya-Uganda railway, the opening of which was perhaps the most important event that led to the opening up of the East African hinterland. The Indian workers laboured successfully under the most difficult conditions. It is important for Africa and the world to know that India's expertise in railways, which is now being sought by many countries of Africa, dates back to 1898, when the Mombasa-Kampala railway was built by Indians.

One will fully agree with the author that the contribution made by the people of Indian origin from 1910 onwards in trade, in agriculture — cotton, sugar, tea and coffee — in setting up industries, in urban development, in providing professional services, and in various other fields, led to Uganda becoming the most prosperous territory in East Africa. But a reading of the book leaves the impression that it is an essentially committed work, commissioned by wealthy Asians and that too, the more reactionary and the wealthier among them. Ramchandani went to Uganda for his doctoral thesis, on which the book is based, with a grant from the government of India. He also received financial assistance for his research work from the Madhvani

family of Uganda and from the Sri Brihad Bhartiya Samaj, an organisation for the Indians overseas.

The majority of Asians in East Africa were wrong in their political calculations. Before independence the Asian community by and large supported the British with a view to protecting its economic interests. When independence came, therefore, the Asians could no more expect to be treated as the superior beings they considered themselves, by the Africans. It is a pity that the author has not even mentioned the role of the Indian government before and after Uganda's independence; Apa Pant's good work in East Africa, as well as Nehru's advice to the Asians to identify themselves with the people of Africa and to accept the paramountcy of African interests does not even receive a mention in the book. While discussing the roots of racial friction in Uganda, Ramchandani takes a completely pro-Asian stand and hardly tries to understand the African mind. Merely saying that the Asians belonged to the upper class does not explain the African dislike for the Asians.

But how could Ramchandani understand the African point of view? On his own admission the author undertook a three-month "extensive tour of Uganda in course of which I mostly lived in the midst of the Asian community with a view to mix with the Asians more freely, to know their mind in their past contribution towards the development of the country ...". He does not say anywhere that he met a single African to know his mind too.

As to Idi Amin's expelling 50,000 Asians in 1972, it is sad to remember those dark days. The expulsion of those who had lived in Uganda for generations, with a three-month deadline set for their departure, was a harsh measure. If the Ugandan leader had some compassion, he should have given them at least one year to pack up and go. While Amin was politically correct in expelling the British passport holding

Asians, one wonders why he chose that particular time for the drastic step. The author is right in saying that the fast deteriorating situation in 1972 created by the ousted president Obote's supporters on the Tanzanian and Sudanese borders, and tribal feuds in the country compelled Amin to take this step. It is tragic but true, as the author says, that "the Asians were essentially the victims of that situation even though they had little to do with its creation." For all that, no one can blame Amin for ousting the non-citizen Asians and putting Ugandan economy in the hands of the natives. When a large majority of Asians opted for British citizenship, they bargained for such a consequence.

It is noteworthy that Uganda has, in a business-like manner, compensated the Asians who had held Indian passports. Perhaps the British Asians also will be similarly compensated. Yet president Amin has no regrets for his action in expelling the non-citizens. As a matter of fact he sent a cable to president Hastings Banda of Malawi only recently advising him to throw out the "blood-sucking" Asians. It is important to know that by expelling the British Asians, the Ugandan leader not only solved his political problems, but became a hero in his own country. These political realities of modern Africa can be understood by Indian authors only if they care to view with greater sympathy African urges and aspirations.

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### Southern Boraax

SOUTHERN BORAAX, after surmounting various difficulties, commissioned its plant towards the end of May last, and put borax crystals on the market in September. It has also completed all preliminaries for manufacture of boric acid. The management takes pride that theirs is the first company in India to manufacture borax with indigenous knowhow and that quality of its products matches international standards. The company expects to enter the export market soon. The chairman, A Nagappa Chettiar, says that the company has had to encounter a well entrenched international monopoly in the field of marketing and face initial pricing problems. Meanwhile, the cost of the project has increased due to increases in prices of certain items of plant, machinery and buildings and rise in pre-operative expenses consequent to delay in commissioning of the plant.



This is only an announcement and not a prospectus

# NATIONAL MACHINERY M

(Incorporated under the  
Regd. Office: Mafatlal Ce

Announcement regarding issue of **80,000 11% Cumulat**

## SHARE CAPITAL

Authorised	Rupees
1,00,000 11% Cumulative Redeemable Preference Shares of Rs.100/- each	1,00,00,000
4,00,000 Equity Shares of Rs.100/- each	4,00,00,000
	<u>5,00,00,000</u>
Issued	
2,95,696 Equity Shares of Rs.100/- each	2,95,69,600
Subscribed & Paid Up	
2,52,400 Equity Shares of Rs.100/- each (out of which 26,000 Equity Shares are issued and allotted as fully paid up pursuant to a contract without payment being received in cash)	<u>2,52,40,000</u>

## PRESENT ISSUE

80,000 11% CUMULATIVE REDEEMABLE PREFERENCE SHARES OF Rs.100/- EACH FOR CASH AT PAR. —Free of Company's tax but subject to deduction of tax at source at the prescribed rates and subject to the provisions of the Companies (Temporary Restrictions on Dividends) Act, 1974.	<u>80,00,000</u>
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## NOW OFFERED TO THE PUBLIC FOR SUBSCRIPTION FOR CASH AT PAR IN TERMS OF THE PROSPECTUS

80,000 11% CUMULATIVE REDEEMABLE PREFERENCE SHARES OF Rs.100/- EACH FOR CASH AT PAR. —Free of Company's tax but subject to deduction of tax at source at the prescribed rates and subject to the provisions of the Companies (Temporary Restrictions on Dividends) Act, 1974.	<u>80,00,000</u>
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## TERMS OF PAYMENT

The full amount of Rs. 100/- per Share is payable on application. The application must be for a minimum of five Preference Shares or multiples of five. Application has been made to the Bombay Stock Exchange for permission to deal in and for an official quotation for the 80,000 11% Cumulative Redeemable Preference Shares now being offered

## Brief History & Present Activities

The Company was incorporated on 1st September, 1947 with the main object of manufacturing Textile Machinery and Spares in India. In 1972 as a part of the Diversification Programme, the Company decided to commence the business of manufacturing Synthetic Fibre Machinery and other Sophisticated Industrial Engineering Products

The Company is licensed to manufacture full range of Spinning Machines viz. Blow Room Machinery, Carding Machines, Draw Frames, Combers, Fly Frames, Ring Spinning, Doubling & Worsted Frames, as well as Rings, Spindles & Fluted Rollers; Automatic Looms including Shuttleless Looms; Synthetic Fibre Machines viz. Cold & Hot Setting Draw Twisters, Take-up Machines & Texturising Machines, and Hydraulic Infinitely Variable Gear Boxes. The Company has also received a Letter of Intent for the manufacture of Open-end Spinning Machines.

The Company was manufacturing spinning machines in technical collaboration with Textile Machinery Makers Ltd., U.K. and Automatic Looms in technical collaboration with Ruti Machinery Works Ltd., Switzerland. Both these collaboration agreements have since expired and the Company continues to manufacture these machines and have incorporated many new features specially developed by the Company's own Research & Development Department. The Company is manufacturing Synthetic Fibre Machines in technical collaboration with Barmag Barmer Maschinenfabrik A.G., West Germany. The Company will manufacture Hydraulic Infinitely Variable Gear Boxes in technical collaboration with Gebr. Boehringer GmbH, West Germany, and Shuttleless Looms and Open-end Spinning Machines in technical collaboration with Societe Alsacienne De Constructions Mecaniques De Mulhouse, France.

The Company established the factory in 1948/53 at Kalwe in Thana District, Maharashtra. In 1973 the Company established another factory at Baroda to manufacture Synthetic Fibre Machinery and other sophisticated Industrial engineering products.

The machines manufactured by the Company are well accepted by Textile Mills in India as well as abroad, and enjoy an excellent reputation with the customers.

The Company has worked out a modernisation programme for Kalwe Works and it is proposed to spend approximately Rs. 205 lacs during the 5 year period 1976-80. It is also proposed to spend Rs. 60 lacs for capital assets at Baroda Works to make production facilities reasonably balanced.

The modernisation programme will be implemented in a phased manner and will be financed partly from the proceeds of the Preference Shares now being offered and partly from internal resources and also, if necessary, the Company may avail of facilities for purchasing machinery on deferred payment terms and raise Medium/Long Term Loans.

## BOARD OF DIRECTORS

**Shri Arvind Navin**  
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Bhulabhai Desai Road,  
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**Shri Madanmohan**  
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**Shri Pratap Bhogila**  
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**Shri James S. Raj**  
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**Shri Russi Jal Tara**  
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**Shri Nusli Neville V**  
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'Kalpana' No. 4, V. Pal  
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Industrialist

**Shri Bhaskar Gane**  
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## SECRETARY

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Subodh-Guru, Flat No  
Santacruz (West), Bor

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Bombay-400 023.

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M/s. K.S. Aiyar & Co.,  
49-55 Bombay Samac  
M/s. Dalal & Shah  
49-55 Bombay Samac



# MANUFACTURERS LIMITED

(Companies Act VII of 1913.)

Point, Bombay-400 021.

able Preference Shares of **Rs.100/-** each for cash at par.

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kshi (Vice-Chairman)  
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a Gandhi Road,

ombay-400 023

ombay-400 023

## UNDERWRITERS TO THE ISSUE

The entire issue now offered has been underwritten as follows:

	Amount Underwritten Rs. in lacs.
The New India Assurance Company Ltd.	12.50
The Industrial Credit & Investment Corpn. of India Ltd.	10.00
General Insurance Corporation of India	10.00
The Oriental Fire & General Insurance Co. Ltd.	10.00
Industrial Finance Corporation of India	5.00
Gujarat Industrial Investment Corporation Ltd.	5.00
The United India Fire & General Insurance Co. Ltd.	5.00
National Insurance Company Limited	5.00
Mahadevia Bros.,	5.00
Bank of India	5.00
United Commercial Bank	5.00
Punjab National Bank	2.25
Babubhai Maganlal Gandhi	0.25
<b>Total</b>	<b>80.00</b>

In the opinion of the Directors, the resources of the Underwriters are sufficient to discharge their respective underwriting obligations.

## MANAGING BROKER

Mahadevia Bros., Stock Exchange Building,  
Dalal Street, Bombay-400 023.

## BROKERS

### BOMBAY

Mahadevia Bros., Stock Exchange Bldg., Dalal Street  
Harkisondas Lakhmidass, Stock Exchange Bldg.,  
Dalal Street  
Chimanlal J. Dalal & Co. 107 Stock Exchange Bldg.,  
Dalal Street  
Dhirajlal Maganlal Sons, Stock Exchange Bldg.,  
Dalal Street  
Batlivala & Karani, Union Bank Building, Dalal Street  
Lewis & Jones, Bank of Baroda Bldg.,  
Bombay Samachar Marg.  
Bhupendra Champaklal Devidas, Bhupen Chambers,  
Dalal Street  
D.S. Purbhoo Das & Co., Stock Exchange Bldg.,  
Dalal Street  
K.J. Shah & Sons, Stock Exchange Bldg., Dalal Street  
Prabhudas Lilladher, 5A Hamam Street  
Dalal & Broacha, Stock Exchange Central Bldg.,  
1st Floor, Dalal Street  
Jamnadas Khushaldas & Co., 11-13, Mint Road  
Jamnadas Morarjee & Co., 5A, Hamam Street, First Floor  
Babubhai Maganlal Gandhi, Stock Exchange  
Central Bldg., 14, Mezzanine Floor, Dalal Street  
Valji Bhimji & Co., 24, Stock Exchange Central Bldg.,  
Dalal Street, Fort.  
Rasiklal Maneklal & Co., 16, Stock Exchange  
Central Bldg., Bombay Samachar Marg.

## AHMEDABAD

Chimanlal Lalbhai, 2286 Manek Chowk.  
Ratilal Mansukhlal Parikh, Opp. Stock Exchange,  
2221/3 Manek Chowk

## CALCUTTA

Chunilal T. Mehta, 7, Lyons Range,  
Stewart & Co., 14 India Exchange Place, Post Box No. 291

## NEW DELHI

Bharat Bhushan & Co., H-45 Connaught Place  
Jalan & Co., Stock Exchange Building, Asaf Ali Road.

## MADRAS

Chitra & Company 322-323 Linghi Chetty Street  
Ganga & Company, 272 3, Angappa Naick Street.

## INDORE

Pushkarlal Ghudawala, 44, Bada Sarafa, Indore.

## HYDERABAD

P.B. Afzulpurkar, 4-5-195, Sultan Bazar.

## BANGALORE

M. Nanjappaiah Jahgirdar, 205, Cavalry Road.

## BANKERS TO THE ISSUE

Punjab National Bank,  
PNB House, Sir P.M. Road, Bombay-400 023.  
AND Main Branches at Ahmedabad, Delhi, Calcutta,  
Madras, Hyderabad, Indore and Bangalore.  
Bank of India,  
70-80 Mahatma Gandhi Road, Bombay-400 23.  
United Commercial Bank  
Dr. D.N. Road, Bombay-400 023.  
Bank of Baroda,  
Apollo Street, Bombay-400 023.

Persons interested in further details and/or desirous to apply for the Preference Shares may obtain copies of the Prospectus and Application Forms from the Registered Office of the Company, Underwriters, Brokers, Managing Brokers or Bankers to the Issue.

Application Forms (applications must be for 5 Preference Shares or multiples of 5) duly completed and signed should be delivered together with cash or Bank Draft or cheque at rate of Rs. 100/- per share to any of the Bankers to the Issue. Cheques Demand Drafts should be given on banks situated in the towns where applications are submitted.

## Opening Date:

**Wednesday, 7th July, 1976.**

## Closing Date:

**Saturday, 17th July, 1976.**

## But Not Earlier Than:

**Friday, 9th July, 1976.**



# The Economic Situation

K N Raj

*There is little doubt that the economic situation in the country is much better than it was two years ago.*

*The reasons for this are of a very varied nature, including undoubtedly the fear that has been instilled into certain categories of traders by the measures taken after the Emergency.*

*Factors other than those introduced by the Emergency appear to have been, however, by far the more important for the downward trend in prices in evidence over the last year.*

*Moreover, some of the measures taken for the purpose carry with them serious implications for the future, particularly when judged in relation to the enormous and growing problem of unemployment.*

IN view of the importance of agriculture, particularly of foodgrain output, to price movements (and much else) in the economy, we shall start first with a review of foodgrain production and its impact on prices in the last two years. According to the forecasts available early in 1974, foodgrain output in the country in 1973-74 was estimated first at 114 million tonnes (this was the estimate given in the Draft Fifth Five-Year Plan). It was then revised downwards to 110 million tonnes at the beginning of the Budget session of the Parliament in February 1974. Since the output of foodgrains had fallen to about 95 million tonnes in 1972-73, on account of drought conditions, the immediate prospect appeared to be therefore one of a substantial and welcome increase. What was in doubt was whether the system of procurement and distribution of foodgrains would be improved — in the face of opposition from the concerned farmer lobbies — sufficiently to insulate the economy from the pressures that would inevitably emerge from higher investment outlays (of the kind visualised in the Fifth Plan period) and periodic failures of harvest.

It was also evident at the time that, even if the output realised in 1973-74 was as high as the original estimate of 114 million tonnes, the compound rate of growth of foodgrain output in the period 1964-65 to 1973-74 would be only about 2.5 per cent per annum compared to the rate of 2.9 per cent per annum achieved in the period 1952-53 to 1964-65. In other words, despite the impressive growth of output of some foodgrains after the middle sixties, particularly of wheat, the rate of growth of output of foodgrains as a whole was clearly lower in the period associated with the Green Revolution in India than in the period preceding it.

As it turned out, the estimate of foodgrain output in 1973-74 was subjected to further downward adjustments

by stages, and the final estimate available now places it at no more than about 104.5 million tonnes. (Incidentally, this kind of over-estimation of foodgrain output, followed by subsequent downward adjustments later, carries with it obvious dangers for policy-makers and could lead to disastrous results as happened in China at the time of its Great Leap Forward.) The output in 1974-75 was lower still, being only about 101 million tonnes.

Not surprisingly, the index number of wholesale prices continued to rise even after the summer of 1974, recording an increase of about 14 per cent between March and October 1974. There was in fact no significant fall in it till October 1975, by when it was clear that the harvest of 1975-76 would be a bumper one on account of the excellent monsoon in almost all parts of the country.

Imports of foodgrains had meanwhile been stepped up from less than 0.5 million tonnes in 1972 to over 3.5 million tonnes in 1973, 4.75 million tonnes in 1974, and about 7.5 million tonnes in 1975. Foodgrain prices therefore started falling a little earlier, and have recorded since September 1974 much sharper rates of decline than prices of commodities in general. They dropped by as much as 14 per cent in the period upto September 1975, and by another 13 per cent between then and December 1975.

It is now estimated that the bumper harvests of 1975-76 are likely to yield an output of 118 million tonnes of foodgrain; this appears probable. However, even if it turns out to be correct, the rate of growth of foodgrain output recorded over the period 1964-65 to 1975-76 would be still no more than 2.6 per cent per annum. The rice crop is reported to have been exceptionally good this year, yielding an estimated output of 48 million tonnes; but, once again, assuming that the estimate is

correct, the compound rate of growth of rice output in the period 1964-65 to 1975-76 will work out to only about 1.8 per cent per annum compared to the rate of 3 per cent per annum recorded in the period 1949-50 to 1964-65.

## NO CAUSE FOR COMPLACENCY

There is therefore obviously no ground for complacency on this front. One bumper harvest does not make an era of plenty any more than one swallow makes a summer. This does not of course mean that nothing significant has been achieved in this sphere during the last decade. But for the introduction of high-yielding varieties the output of foodgrains may have grown at an even slower rate. The point to note is only that much more has to be achieved in agriculture to arrest erosion in levels of nutrition among the great majority of the people, not to mention the improvements needed; and that euphoria generated by terms such as 'Green Revolution' and by occasional bumper harvests should not lull us to the harsh realities.

Since agriculture is the basic source of income for more than two-thirds of the population of the country, and it also provides the raw materials needed by the traditional manufacturing industries such as cotton and jute textiles, sugar, tea and vegetable oils, the rate of growth of agricultural output affects the rate of growth of industrial output in two ways: first, through the demand it generates among the agricultural population for the products of industry and, second, through the extent of availability of the raw materials needed for a large segment of the manufacturing industries. In the period before 1964-65, the output of manufacturing industries as a whole could grow at a much faster rate than would have been feasible on the basis of the rate of growth of agricultural output alone. This was mainly because many metallurgical



gical and chemical industries were being expanded rapidly to reduce dependence on imports. But the process of import substitution was to a large extent completed by the middle sixties and consequently the rate of growth of output of manufacturing industries has been significantly lower since then. According to the available data on indices of industrial production, it grew at a compound rate of nearly 7 per cent per annum in the period 1956-61 and about 9 per cent per annum in the period 1961-65, but declined to about 3.25 per cent per annum in the period 1965-70 and less than 3 per cent per annum in the period 1970-74.

#### CONSTRAINTS ON INDUSTRIAL GROWTH

According to the latest Economic Survey for 1975-76, presented by the Finance Minister to the Parliament along with the Budget, the index of industrial production recorded in 1974-75 an increase of only 2.5 per cent over the previous year; in the first six months of 1975-76 the rate of growth recorded was about 3 per cent per annum, and the hope has been expressed that for the year as a whole it would touch a rate of 4.5 per cent. Thus it would appear that growth of industrial output in the last two years taken together has proceeded only at about the same rate as over the decade 1965-74.

Since the rate of growth of industrial production has touched somewhat higher levels in the last six months or so some very optimistic forecasts have been made on the prospects for the future. It is actually too early to say anything about this. A significant part of the growth of industrial output during this period appears to have been in public sector enterprises such as steel, and many of them have accumulated large unsaleable stocks in the process. Of course, as the growth of agricultural income from the bumper harvest last year gets reflected this year in increased consumer demand from this sector, manufacturing industries will receive some stimulus for further expansion. Moreover, since the Budget for 1976-77 visualises higher development expenditure this year, this will also help, particularly in increasing the demand for the output of capital goods industries. The growth in industrial output in 1976-77 may therefore well show a significant improvement compared to the period since 1965.

But, once again, a significant increase in output in one or two years does not necessarily mean the establishment of a new trend. In fact, such increases have

taken place earlier, such as in 1968 and 1969 when the rate of growth of industrial production averaged 6.5 per cent, and again in 1972 when it was over 7 per cent. They are usually a reflection of particular favourable circumstances in certain years, such as arising out of bumper harvests in the years immediately preceding.

The only way of getting out of the constraints imposed by the pace of agricultural growth on industrial expansion is to concentrate on manufacturing industries which neither depend very much on growth of demand from the mass of the agricultural population nor require agricultural raw materials to any significant degree. These conditions are satisfied by many metallurgical and chemical industries catering to the requirements of the higher-income groups in our society. Perhaps it needs to be made clear in this context that the so-called "middle classes" belong in fact to the top 5 per cent of the population, whether ranked in terms of income or wealth. This will make clear the economic logic underlying some of the measures that have been taken recently to stimulate growth in the demand for durable consumer goods and the like. That this kind of strategy can "work" upto a point, if one can be sufficiently insensitive to the consequences of skewing income distribution further in favour of the upper strata (in effect, say, the top decile of the population in terms of income and wealth), is undeniable. In fact, it worked so well in Brazil until recently that it is now often referred to as the "Brazilian model". The social and political implications of this kind of strategy are however so obvious that there is no need to elaborate on them.<sup>1</sup>

Apart from the features of agricultural and industrial growth over the last decade outlined above, one other feature concerning the economy as a whole needs to be also noticed. It is that the proportion of the total national output of each year set apart for capital formation (that is, for promoting the further growth of output), has not risen since the middle sixties. This has important implications not only for the rate at which output can be increased in the future but for our capability to handle the unemployment problem in the country which has been growing at a very rapid rate.

#### UNEMPLOYMENT PROBLEM

Let me at this stage add a few words about the magnitude of the unemploy-

ment problem, more particularly about two categories: the number of applicants on the live registers of the Employment Exchanges (which broadly reflects the trends in urban unemployment and, more so, unemployment among the 'educated') and the number of agricultural labourers dependent on wage employment in the rural sector.

Until 1962, the growth in the number of applicants on the live registers of the Employment Exchanges was largely a reflection of the growth in the number and geographic coverage of the Exchanges set up; but this is no longer an important factor. Nevertheless, this number increased from no less than 2.6 million in 1966 to 8.4 million in 1974 and is now probably around 10 million. Not all those who register themselves in the Employment Exchanges are necessarily unemployed but, on the other hand, not all the unemployed register themselves. The trend reflected by the registrations can therefore be reasonably regarded as a reflection of the trend in unemployment among those geographically covered by these Exchanges.

In the rural sector, unemployment is usually most acute among agricultural labourers, who include not only those without land but those with holdings so small that they are dependent to a significant degree on wage employment. For about three decades, from 1931 to 1961, the number of male agricultural labourers, as reported in the decennial population censuses, varied between approximately 15 and 17 million; between 1961 and 1971 there has been however an increase of this number by no less than 90 per cent.<sup>2</sup>

All this reflects essentially the pressure of the growing numbers, born 15 to 20 years earlier, now entering the labour market in search of employment and failing to find it on account of inadequate opportunities in agriculture and the very slow expansion of employment opportunities in manufacturing industry. The magnitude of this problem is likely to assume much larger dimensions within the next decade since, according to projections published by the Planning Commission, the male labour force alone is expected to grow from 152 million in 1974 to 196 million in 1984.

The only way of coping with this problem is by expanding the scope for increasing the intensity of labour input in agriculture and expanding opportunities for employment in other sectors simultaneously. This would require not only capital formation on a much larger scale than now but capital formation of a very different character in certain



important respects, as well as far-reaching organisational changes (particularly in agriculture) to facilitate the use of labour for productive purposes. The task is such a gigantic one that no one who knows what it involves can make light of the obstacles to be overcome and the problems that it will inevitably raise. Yet, placed in the position that we are, there is really no alternative; nor is there any time to be lost. What it requires is nothing less than a total national effort, based on a full understanding of what needs to be done and willingness to compromise where it would help to mobilise such effort, but not just a patched-up coalition of diverse interests pulling apart and kept together by only opportunistic considerations or just plain fear. To this aspect of the challenges facing us I shall revert again but, before I do so, I would like to touch upon a few other strictly economic aspects of the problem.

#### SAVING AND INVESTMENT

The main difficulty now in raising the proportion of national output devoted to capital formation is that, without a higher rate of saving, the expenditure on such investment tends to increase the demand for consumer goods and raise their prices. It happens to be the case that this problem is not so serious this year on account of the bumper harvest and the large buffer stocks of foodgrain now held in reserve.<sup>3</sup> However, if the investment expenditure in the economy is raised significantly enough, the pressure of demand on the available supplies will tend to raise prices. This can happen even in the course of the next few months if the monsoon this year turns out to be a poor one and expectations of foodgrain output next year are thereby seriously affected. Once foodgrain prices start rising the upward momentum is likely to be as sharp as the downward movement in the course of the last year. Moreover, if the buffer stocks of foodgrain are then used to hold down the price-line (since this is indeed the purpose for which they are held), the rate at which they are used up is likely to average about a million tonnes a month as in 1972-73. While the large stocks built up are therefore certainly a source of confidence, it is important not to underestimate the dangers that may still be lurking around the corner.

In fact it is precisely such an unexpected turn of events, caused by monsoon failures, that has frustrated previous attempts to raise the proportion of national output devoted to capi-

tal formation. When prices get out of hand, not only has the entire investment effort to be put into reverse gear but the country is compelled to depend heavily once again on large injections of foreign aid. A kind of stop-go movement, characterised by assertions of "self-reliance" in one phase and abject quests for more foreign aid in the other, has thus characterised our development effort for well over a decade.

The decline in prices over the last two years was in fact made possible not only by the bumper harvest of 1975-76 but by slowing down the rate of capital formation in the country and simultaneously allowing the import surpluses financed by foreign aid to grow. According to the estimates of the Central Statistical Organisation of the Government of India, the rate of net capital formation (expressed as a percentage of the net domestic output), which had touched a level as high as 15.5 per cent in 1966-67 (supported by foreign aid to the extent of 3.5 per cent of the net domestic output), and was as high as 13.75 per cent even in 1972-73 (with foreign aid amounting to no more than about 0.5 per cent of the net domestic output), declined to about 12.75 per cent in 1974-75 (with somewhat larger aid amounting to about 1 per cent of the net domestic output). The import surplus in commodities, which was no more than Rs 178 crores in 1969-70, increased to Rs 402 crores in 1973-74 and Rs 1096 crores in 1974-75; and according to the latest Economic Survey, it was about 50 per cent higher in the first nine months of 1975-76 than in the corresponding period of 1974-75.

The meaning of all this is clear and should be obvious. The recent decline in prices is to be attributed not only to the bumper harvest but to reduction in the proportion of the national output devoted to capital formation and reliance on larger import surpluses. In so far as reduction in the rate of investment merely postpones and accentuates the problem of absorbing the growing number of unemployed and underemployed people, one can legitimately say that the reduction in prices has been achieved in part at the expense of the additional employment that could have been created. The middle classes with fixed incomes (as also the working classes, in so far as they are not in a position to secure higher money wages in step with rise in the prices of essentials) are of course interested, and understandably so, in price stability. But the fact that they do not always see clearly at what cost such price stability may

be obtained, and how they themselves suffer later on account of unemployment, does not mean that it is a good thing to let them continue in their ignorant faith and consequent illusions.

#### TAX CUTS AND TAX REVENUE

There is indeed a widespread belief that some of the policies and measures adopted and/or intensified by the government in the course of the last two years have been primarily responsible for the fall in prices during this period. There is also an impression that these policies and measures are helping to increase the rate of saving in the economy and thus sustain higher rates of capital formation. One such measure that has been very much in prominence recently is reduction in rates of income-tax which, it has been claimed, has had the effect of increasing tax revenue from this source more than proportionately. Related to this are the results of the Voluntary Disclosure Scheme. Another set of measures mentioned in this context relate to control of smuggling, illicit holding of foreign exchange abroad, etc.

There is no doubt that some measures taken recently have made a difference. Nothing is gained by denying or underplaying the importance of their contribution. However, the general public is not perhaps as well informed as they need to be about all the facts relating to them and the other factors that have independently contributed to the apparent success of these measures.

Consider, for instance, the reported buoyancy of the revenue from income-tax. The revenue from this source depends mainly on incomes earned in what is generally described as "organised sector" of the economy. Estimates of the factor incomes from this sector are now published by the Central Statistical Organisation of the Government of India for the period upto 1972-73. A close analysis of the relevant data shows that revenue from income-tax has fluctuated between 4.40 and 5.32 per cent of the total income from the organised sector over the period 1960-61 to 1972-73. Since the total national income at current prices is estimated to have increased by over 50 per cent between 1972-73 and 1974-75 one must expect that the income from the organised sector would also have increased in at least the same proportion. If one estimates on this basis the proportion that revenue from income-tax forms of the income from the organised sector in the period since 1972-73, it is evident that, despite the enlarged collections



from this source, they form only about 5 per cent of the total income from this sector in 1973-74 and 4.82 per cent in 1974-75.

Further, there is strong reason to doubt the accuracy of the estimate of the revenue collected through income-tax in 1974-75, as reported in the latest Budget. Since a high proportion of the revenue so collected goes to the state governments it is possible to cross-check the accuracy of the figure with reference to the amount distributed to the state governments as their share during the year. Such a statistical exercise shows that, while the share of state governments has not fallen below 70 per cent of the total revenue collected from income-tax in any year since 1970-71, it fell very sharply (and most inexplicably) to less than 59 per cent in the final 'accounts' for 1974-75. Either the state governments have not received their due share or, as appears more likely from other independent evidence, the reported total revenue from income-tax in 1974-75 has been over-stated. If we assume that the reported share of the state governments (Rs 512 crores) was no less than 70 per cent of the total tax revenue from this source in 1974-75, the latter could not have been much more than Rs 730 crores.<sup>4</sup> If this interpretation of the available data is correct the implications are obvious, particularly since the buoyancy of the estimated tax revenue from this source in 1974-75 has often been cited in support of the view that reduction in the rates of taxation of income (as recommended by the Wanchoo Committee) had in fact the intended result of increasing the revenue from income-tax by a much higher proportion. This is questionable.

#### VOLUNTARY DISCLOSURE SCHEME

In 1975-76 there has been (according to the "Revised Estimates" for the year) a further sharp increase of the total revenue from income-tax. Evidently this is explained largely by the amounts collected under the Voluntary Disclosure Scheme. Since the details of these collections have not been published so far, it is difficult to attempt any serious analysis of what precisely they represent and how effective the Scheme has in fact been.

It needs to be noted however that, of the total disclosed amount of over Rs 1,500 crores, the *income* on which tax has been evaded amounts to only about Rs 740 crores, the balance of about Rs 800 crores being disclosures of *wealth*. The tax collected on the latter was *less* than

1 per cent of the wealth so disclosed, which suggests that, since 1 per cent is the lowest rate at which wealth tax could be imposed, the amounts disclosed would have been almost wholly in the lowest range of taxable wealth.

As for the income of about Rs 740 crores disclosed, this may be compared with the estimate of Rs 1,400 crores which the Wanchoo Committee suggested was the income on which tax was evaded in 1968-69; if the method adopted by the Committee is used to estimate the income on which tax was evaded in 1974-75, it would amount to approximately Rs 2,800 crores. Moreover, the estimate made by one of the members of the Committee, D K Rangnekar, was about two-thirds as high for even 1968-69; on that basis, the estimate for 1974-75 would be nearly Rs 4,700 crores. All these estimates are of course based on rather arbitrary norms. One can judge the success of the Voluntary Disclosure Scheme only if the government chooses to make available more details about the collections than it has so far.

As for measures taken to curb smuggling and curtail holdings of foreign exchange abroad, it is a fact that remittances from Indians abroad have been averaging recently to Rs 125 crores per month. They have helped to strengthen foreign exchange reserves of the country very considerably in the course of the last year. However, again, we need to look closer and understand the nature of the success achieved and the reasons for it.

Under a scheme which became effective from November 1975, non-resident Indians and persons of Indian origin were permitted to open accounts in Indian banks, maintain balances designated in foreign currencies, and hold them in the form of term deposits earning high rates of interest. Not only was the interest accruing from these deposits declared tax-free, but both the principal and the interest accumulations on it, it was announced, could be repatriated out of India in the same designated foreign currency. Obviously the rate of return on these deposits has been attractive enough for large sums to be remitted to India under this scheme.

On the whole, this must be regarded as an imaginative scheme for attracting the savings of Indians abroad for investment in India (though perhaps open to abuse). However, there are three points which need to be noted. First, the remittances received in the last few months may to some extent represent past savings held hitherto in some

other form, and so the flow of current savings one can count on the future may not be so large. Second, thanks to the system of floating exchange rates, the rupee value of foreign currencies like the US dollar has risen significantly since April 1975, from less than Rs 8 per dollar to over Rs 9 per dollar by November 1975. Third, the price of gold in the foreign markets has risen considerably relatively to its price within India thus reducing sharply the gains from smuggling of gold into the country. All these factors have contributed significantly to the tendency recently in evidence to remit money back through normal banking channels on a much larger scale than before. Since some of them may prove to be transient, one has to be careful about the inferences drawn from the recent inflows of foreign exchange.

#### ENDS AND MEANS

To sum up, there is little doubt that the economic situation in the country is much better than it was two years ago. The reasons for this are of a very varied nature, including undoubtedly the fear that has been instilled into certain categories of traders by the measures taken after the Emergency. Factors other than those introduced by the Emergency appear to have been, however, by far the more important for the downward trend in prices in evidence over the last year. Moreover, some of the measures taken for the purpose carry with them serious implications for the future, particularly when judged in relation to the enormous and growing problem of unemployment. The latter, if not tackled in the manner needed could engulf the whole country in chaos within the next decade. The challenges it presents are indeed so formidable that nothing but a massive mobilisation of effort can make any significant impression on the problem. When one views the present policies and measures in this wider context, one cannot but be impressed with the trivial nature of many of the "points" of action now so much in the limelight and the very superficial understanding of some of those adding to such "points" of action.

Programmes of action, framed in such a manner that ordinary people can understand, are obviously necessary, particularly in a country in which a high proportion of the population is illiterate. But it is equally important not to cash in on their illiteracy and pass off as radical programmes, measures which are not adequate for the purposes they



are supposed to achieve. Such a strategy may bring in some dividends in the short run but can be disastrous over a longer period.

Unfortunately, most of the political parties in opposition have paid no more attention to the basic reasons for the problems facing the country than those whom they criticise. Some of them give the impression that the most important problems to be faced now are related to particular personalities, or to symptoms of social malaise such as corruption or to side-issues such as prohibition and cow-slaughter. It is, however, necessary to go deeper into the reasons for the economic and social crisis in the country and try to understand what is responsible for the eclipse of sound liberal and moral values. This is the least that can be expected in a country which won its freedom under the leadership of Mahatma Gandhi

and Jawaharlal Nehru and whose motto still is "Sathyameva Jayate".

### Notes

[This is a slightly edited version of a lecture delivered at the Ecumenical Christian Centre, Bangalore, on June 26.]

- 1 Those interested in the details of the Brazilian approach may refer to my paper on "Growth and Stagnation of Indian Industrial Development", presented at the Indian Institute of Technology on February 6, 1976 and later published in *Economic and Political Weekly*, Vol XI, Nos 5, 6 and 7.
- 2 Those interested in the details of this and other estimates relating to the rural sector may see my paper on "Trends in Rural Unemployment in India, with Reference to Conceptual and Measurement Problems", prepared for a symposium organised at the Centre for Development Studies, Trivandrum, from

July 5 to 8, 1976. This paper will be published (with revisions if needed) shortly after the symposium.

- 3 Procurement of foodgrains in years of bumper harvest is relatively easy, as the prices offered help to prevent market prices falling further. See N Krishnaji, "Wheat Price Movements", *Economic and Political Weekly*, Review of Agriculture, June 30, 1973.
- 4 Even allowing for some time-lag in accounting adjustments in the allocation of the share of the state governments, it appears highly improbable that the total amount collected by way of income-tax during the year could have exceeded by more than Rs 25 to 30 crores the "Revised Estimates" (presented in March 1975) which placed the total at Rs 747 crores. See, in this context, I S Gulati "Growth-Oriented Budget: An Analysis of Major Suggestions", *Economic and Political Weekly*, Vol XI, No 11, March 13, 1976.

## Price of Rural Credit An Empirical Analysis of Kerala

T V Narayana Kurup

*This article, based on a pilot survey in Trivandrum taluk, seeks to bring out certain less known but crucial aspects of the rural credit market in Kerala.*

*Non-institutional agencies account for an overwhelming proportion of the credit supply in Kerala. The average rate of interest is much higher than the average indicated by the Reserve Bank's All India Debt and Investment Survey.*

*The bulk of the institutional credit is appropriated by a relatively small proportion of households belonging to the upper stratum of families. The cost of credit is thus inversely related to the economic status of the borrower.*

*The distinction between professional and non-professional moneylenders is irrelevant in practice; they both cater to the same clientele, take identical types of securities and charge the same high rates of interest.*

*The results of the author's pilot survey also show that the actual interest on a good proportion of loan transactions is concealed.*

IT is widely held that the rates of interest on loans in the unorganised rural capital markets are higher than the rates prevailing in the organised capital markets. In recent years there have been a few attempts to identify the reasons for such high rates on rural loans.<sup>1</sup>

In distinct contrast to this commonly held view, the results of the All India Rural Debt and Investment Survey (1961-62) conducted by the Reserve Bank of India suggest that the average rate of interest on rural credit in this country is very low — much lower than one would *a priori* expect given the nature of the demand for and the

supply of credit in such areas. The average rate of interest on loans taken by rural households, estimated on the basis of the results of the Rural Debt and Investment Survey, work out to about 10 per cent for the country as a whole; for Kerala the rate would be about 3 per cent.<sup>2</sup> Such a low rate of interest appears to be too good to be true in a country like India, in which, according to the above Survey itself, 83 per cent of the borrowings of rural households are from non-institutional agencies.

We, therefore, begin with a brief account of the rural credit market as it emerges from the findings of the

Rural Debt and Investment Survey. We then attempt to advance a hypothesis for the reported low rates of interest. This hypothesis is later verified with the help of data collected through a sample survey.

### I

#### All-India Rural Debt and Investment Survey

The proportion of indebted families, the average amount of outstanding debt, and the proportion of loans supplied by different categories of creditors, as reported by the Survey summarised in Table 1.



TABLE 1 : SOURCES AND COST OF CREDIT IN RURAL SECTOR

	Kerala	All-India
1 Proportion of households reporting debt (per cent)	67.0	62.8
2 Average amount of loan outstanding (Rs)	249.0	406.0
3 Proportion of borrowings from:		
(a) Government (per cent)	1.0	2.3
(b) Co-operatives (per cent)	11.6	13.8
(c) Commercial banks (per cent)	3.9	0.7
Sub total (a to c)	16.5	16.8
(d) Professional money lenders	3.5	12.9
(e) Agriculturist money lenders	6.8	33.9
(f) Landlords	1.2	0.7
(g) Traders and commission agents	7.7	10.1
Sub-Total (d to g)	19.2	57.6
(h) Friends and Relatives	10.8	8.8
(i) Others	53.5	17.0
All non-institutional sources (d to i)	83.5	83.2
4 Proportion of borrowings at nil rate of interest	65.8	29.2
Average rate of interest (estimated)	3.0	10.4

Source: All India Rural Debt and Investment Survey 1961-62 Reserve Bank of India Bulletin, September 1965 and December 1965.

TABLE 2: DISTRIBUTION OF WORKERS IN NEMOM PANCHAYAT

Occupation	Nemom Panchayat		State Average (Per Cent) (1971)
	No. of Workers	Percentage to Total Workers	
1 Cultivation	230	4.96	17.81
2 Agricultural Labourers	2218	33.32	30.69
3 Fishing, hunting, forestry and allied activities	79	1.18	7.00
4 Mining and quarrying	11	0.16	0.48
5 Manufacturing			
(a) Household industry	197	2.69	4.28
(b) Other than household industry	853	12.81	11.46
6 Construction	155	2.32	1.72
7 Trade and Commerce	812	12.20	9.09
8 Transport and Communications	525	7.88	3.89
9 Other services	1475	22.16	13.58
Total	6655	100.00	100.00

Source: Government of Kerala, Census 1971, Series 9, Kerala, District Census Hand Books, (Superintendent, Government Presses, Trivandrum, 1974).

It may be noted that 67 per cent of the rural households in Kerala are reported to be in debt — a slightly higher proportion than in the country as a whole. As to sources of credit, there are some broad similarities. Thus the proportion of loans obtained from institutional sources is more or less the same in Kerala as in the country as a whole. But, commercial banks are seen to have contributed 3.9 per cent of total loans in Kerala, which is more than five times the proportion of loans from this source for all-India. The proportion of credit supplied by non-institutional agencies is identical in Kerala and India, viz, over 83 per cent. Substantial differences are, however, observed in the relative roles played by the different non-institutional categories. Thus the shares of both professional and non-

professional moneylenders in rural credit appear to be smaller in Kerala than elsewhere in India. On the other hand, the residual category, 'others' accounts for about 54 per cent of total loans to rural households in Kerala as against 17 per cent for the country as a whole. The weighted arithmetic mean of the rates of interest on borrowing by rural families works out to a mere 3 per cent in Kerala, less than one-third of that for the country. A high proportion of loans is reported to be interest-free: the proportion was about 66 per cent in Kerala, as against a little over 29 per cent for India.

The principal clue to the low average rate of interest, emerging from the results of the Debt and Investment Survey, lies obviously in the high proportion of loans reported at zero

rate of interest. The reverse association between the average rate of interest and the proportion of loans at nil rate of interest is clearly seen from a comparison between Kerala and India — if any proof were needed. However, one has reasons to doubt that it is possible for borrowers in the rural areas of Kerala to get interest free loans to such a large extent.

It is more likely, for reasons given below, that the interest burden on loans in rural Kerala is much higher than that suggested by the reported statistics. More than four-fifths of the total loans, according to the results of the survey, are obtained from non-institutional sources. It is well known that non-institutional sources charge higher rates of interest than institutional sources. Besides, there might exist, in the rural areas, several categories of loan transactions in which the borrowers do not pay interest in any explicit or direct form; the borrowers may not even be aware of the fact that such loans carry any 'interest'. The conventional types of sample surveys are likely to fail to bring out the disguised interest burden on such loans.

In brief, our hypothesis is the following: The actual rates of interest on loans taken by households in the rural areas of Kerala are high; the explanation for the low average interest rate emerging from the results of the Rural Debt and Investment Survey lies in the failure of the Survey to collect information on the various forms of concealed payment of interest.

## II

### Working of a Rural Credit Market

#### Study Area:

The area selected for the survey is in Nemom Panchayat in Trivandrum Taluk. This panchayat shares the common characteristics of a typical village in Kerala. We expected it to possess the additional advantage of access to credit in larger measure and on more favourable terms in view of the fact that it is situated close to Trivandrum city (less than four miles away) where numerous credit institutions function. In fact, three commercial bank offices and two co-operative credit societies are functioning in the panchayat itself.

The Nemom Panchayat has a total area of 12.12 square kilometres. Ac-



TABLE 3 : DISTRIBUTION OF HOUSEHOLDS ACCORDING TO OCCUPATION

Occupational Groups	Number of Households	Per Cent
I Cultivating Households	34	7.46
II Non-cultivating households:	82	17.98
1 Agricultural labourers	186	40.78
2 Unskilled non-agricultural labour	19	4.16
3 Skilled workers	24	5.27
4 Industrial workers	85	18.65
5 Salary earners	26	5.70
6 Traders	456	100.00
All		

According to the 1971 Census, the population of the panchayat was 25,846. Of this only 6,655 were workers. Thus, the worker participation rate for the panchayat was 25.75 per cent, as against the state average of 28.97 per cent. The percentage distribution of workers in this panchayat is presented in Table 2; it shows that a good proportion of the population is engaged in the primary and the service sectors. Therefore, this area was classified as a primary-cum-service panchayat in the last census.

The Table shows that there are certain significant differences between this panchayat and the state average in the occupational distribution of workers. Thus, only about 5 per cent of the total workers in the panchayat are cultivators, as against the state average of 18 per cent. On the other hand, agricultural labourers constitute a little over 33 per cent of the total workers in the panchayat, the corresponding percentage for the state being about 31. Similarly, the proportion of workers engaged in trade and commerce is 12 per cent in this panchayat, as against 9 per cent for the state. The proportion of workers engaged in services is 22 per cent in the panchayat, which is considerably higher than the state average of 13 per cent.

For the purpose of the present survey, we selected a well-defined rural area of the panchayat comprising portions of three wards and consisting of 456 households. A preliminary survey was conducted in December 1975. All the households in this area were listed with the help of a schedule, and information was elicited on family size, main occupation, land owned, crops grown, amount of loan outstanding, etc., as on December 1, 1975. The results of this survey are presented below.

Out of the 456 households, only 34 reported cultivation as their main occupation. The average size of hold-

ings was 1.44 acres. The important crops grown are coconut, paddy, and tapioca. Paddy is generally cultivated twice a year — viz, in the 'Virippu' and 'Mundakan' seasons. They are mostly rain-fed crops. Tapioca is generally cultivated as an inter-crop in coconut gardens.

Agricultural labour, unskilled non-agricultural manual work, and skilled labour like carpentry, blacksmithy, masonry, etc, absorb a large proportion of the workers. Employment in industries, in and around Trivandrum, is reported by a few households. A good number reported salaried jobs. Trade is the principal occupation of a small proportion of the households — mostly petty trade, consisting of paan-shops, small provision stores, tea shops, etc. The overall impression one gets about the village is that of an area with low levels of income and living.

The occupational distribution of households in the study area is presented in Table 3. The households were classified on the basis of the principal occupation of the head of each family. This procedure has obvious limitations; perhaps a better criterion would be the principal source of income of the households. However, as we found that the attempt to elicit information on income was unsuccessful and that our persistence with this question might adversely affect other aspects of our

enquiry, we had to give it up.

Out of the 456 households, only 34 households, — i.e., 7.46 per cent — are cultivators. The vast majority of the households depend on wage employment as their principal occupation. A break-up of the households in different occupations, according to caste, is given in Table 4.

It is interesting that a significantly high proportion of the self-employed — like cultivators and traders — belong to forward communities such as, Brahmans, Nairs, and Christians. A relatively high proportion of salary earners also belong to this group. As against this, among 'Other Backward Communities' — comprising, Muslims, Ezhavas and Nadars — a good proportion of households depend on wage employment, agricultural as well as non-agricultural. In the case of scheduled caste families, not a single household falls in the categories of cultivators, traders and salary earners; almost all of them earn their incomes from unskilled manual labour.

#### Extent of Indebtedness:

(a) Of the total of 456 households, 306 — or a little over 67 per cent — reported debt outstanding at the time of interview. (It may be recalled that the proportion of indebted families in Kerala in 1961-62, according to the All-India Rural Debt and Investment Survey was 67 per cent)

TABLE 4 : DISTRIBUTION OF HOUSEHOLD BY OCCUPATION AND COMMUNITY

Occupational Group	Forward		OBC		SC		Total	
	No	Per Cent	No	Per Cent	No	Per Cent	No	Per Cent
Cultivators	27	79.41	7	20.59	—	—	34	100
Agricultural labourers	24	29.26	29	33.37	29	35.37	82	100
Unskilled non-agricultural labour	110	59.16	66	35.47	10	5.37	186	100
Skilled workers	9	47.37	10	52.62	—	—	19	100
Industrial workers	14	58.33	9	37.50	1	4.16	24	100
Salary earners	52	61.18	33	38.82	—	—	85	100
Traders	18	69.23	8	30.77	—	—	26	100
Total	254	55.70	162	35.53	40	8.77	456	100



TABLE 5 : PROPORTION OF INDEBTED HOUSEHOLDS AMONG DIFFERENT OCCUPATIONAL GROUPS

Occupational Groups	No of Households	No of Indebted Households	Proportion Indebted Households (Per Cent)
Cultivators	34	25	73.5
Agricultural labourers	82	48	58.5
Unskilled non-agricultural labour	186	140	75.5
Skilled workers	19	16	84.2
Industrial workers	24	15	62.5
Salary earners	85	51	60.0
Traders	26	11	57.7
All	456	306	67.1

We would imagine that the coincidence is nothing more than accidental.) The proportion of indebted households, occupationwise, is presented in Table 5.

The proportion of families reporting outstanding debt, on the reference date, is seen to vary from one occupation to another. The proportion of indebted households range, from about 58 per cent among traders, to about 76 per cent among unskilled non-agricultural labour households. The variations in the proportion of indebted households according to the different occupational groups may be due to a number of factors affecting the supply of and demand for credit. The supply of credit will be available to a greater extent to households belonging to the higher occupations, earning higher incomes and possessing more wealth. The demand for credit could be of two types: one, the demand for consumption credit which is likely to

be higher among households with lower occupations and with lower incomes; and two, the demand for current production and investment purposes which will be higher among households with larger amounts of productive assets, mainly cultivable land, so far as our study area is concerned.

We have already seen that there exists a close relationship between occupation and community. In Table 5 we saw that the extent of indebtedness varies among the different occupational groups. Naturally therefore, a similar relationship should be expected between the extent of indebtedness and the community. This information is furnished in Table 6.

The Table shows that, for all occupations taken together, the proportion of indebted households is the lowest among the Other Backward Communities and the highest among the scheduled castes. However, when the proportions are examined for separate

occupations, we get more interesting results. As noticed earlier, there are no households in our sample belonging to the scheduled castes engaged, in self-employment like cultivation or trade. Between the forward communities and the Other Backward Communities, engaged as cultivators, we find that the proportion of indebtedness is higher among the latter. However, in the other category of the self-employed — viz, traders — the proportion is higher among the forward communities. Among salary earners also, this is the case.

Among agricultural labourers and unskilled non-agricultural labourers, the proportion of indebted households is higher among the Other Backward Communities, than among the forward communities; among the industrial workers the order is the reverse. Households belonging to the scheduled castes are engaged in a variety of labour — agricultural labour, unskilled non-agricultural labour and industrial labour. In all these three categories the proportion of indebted households is higher, than among members of other communities engaged in the same occupation.

(b) The average amount of debt in the study area is Rs 652.9 per household; the amount of debt outstanding per reporting household is Rs 972.9. The average amount of debt among households of different occupational groups is shown in Table 7.

The average amount of outstanding debt among cultivator households is

TABLE 6 : DISTRIBUTION OF INDEBTED HOUSEHOLDS GROUPED ACCORDING TO OCCUPATION AND CASTE

Community Occupational Group	Forward Communities		O B C		S C		Total	Indebted
	Total	Indebted	Total	Indebted	Total	Indebted		
1 Cultivators	27	19 (70.37)	7	6 (85.71)	—	—	34	25 (73.5)
2 Traders	18	10 (55.55)	8	1 (12.50)	—	—	26	11 (57.7)
Sub-total(1—2)	45	29 (64.44)	15	7 (46.67)	—	—	60	36 (60.0)
3 Salary earners	52	34 (65.38)	33	17 (51.51)	—	—	85	51 (60.0)
4 Agricultural labourers	24	10 (41.66)	29	16 (55.17)	29	22 (75.86)	82	48 (58.5)
5 Unskilled non-agriculture labour	110	82 (74.54)	66	50 (75.75)	10	8 (80.00)	186	140 (75.5)
6 Skilled workers	9	8 (88.88)	10	8 (80.00)	—	—	19	16 (84.2)
7 Industrial workers	14	9 (64.28)	9	5 (55.55)	1	—1 (100.00)	24	15 (62.5)
Sub-total (4—7)	157	109 (69.42)	114	79 (69.29)	40	31 (77.50)	396	270 (68.18)
All	254	172 (67.70)	162	103 (64.00)	40	31 (77.50)	456	306 (67.1)

Note: Figures in brackets are percentages.



TABLE 7: AVERAGE DEBT OUTSTANDING AMONG HOUSEHOLDS OF DIFFERENT OCCUPATIONAL GROUPS

Occupational Group	Average Debt Per Household Rs	Average Debt Per Reporting Household Rs
Cultivators	1747.8	2377.0
Traders	565.0	1335.5
Salary earners	802.4	1337.5
Agricultural labourers	351.4	751.4
Unskilled non-agricultural labour	534.3	709.9
Skilled workers	850.0	1009.3
Industrial workers	376.7	602.8
All	652.9	972.9

seen to be significantly higher than among all other occupational groups. This is but natural, since in the first place the cultivators are in need of credit for current production as well as for investment. Secondly, they may have to borrow for consumption purposes also, since their income is seasonal or irregular. On the other hand, they have more assets and, therefore, greater creditworthiness. The size of debt, other things being equal, is a function of the creditworthiness as defined by the size of assets. The relation between assets and debt among cultivators belonging to different size groups, is brought out in Table 8.

Table 8 suggests that, by and large, the amount of debt varies directly with the size of holding. For instance, all the households in this size group below 1 acre have outstanding debt of less than Rs 1,000; 75 per cent of the households in the size group of 1 to 2 acres are seen to have debts in the range of Rs 1,000-Rs 5,000. The highest size group, of 3 acres and above, are the ones with the highest amount of debt also; the loans in the range of Rs 5,000 and above have been taken only by households in this size group. We should note, however, that the size of the sample is extremely small — especially the number of observations in individual size groups.

#### Sources of Credit and Categories of Loan Transactions:

(a) The significant sources of credit in this area are professional moneylenders, non-professional moneylenders, traders, friends and relatives, chit funds, co-operative credit societies, and commercial banks. Professional moneylenders register themselves as such and operate in their offices during office hours. They generally

TABLE 8: DISTRIBUTION OF CULTIVATOR HOUSEHOLDS ACCORDING TO SIZE OF HOLDING AND SIZE OF DEBT

Size Group	Amount of Debt (Rs)				Total	Average Amount
	Nil	0-1000	1000-5000	5000 and above		
0-1	2 (14.3)	8 (57.1)	4 (28.5)	—	14 (100)	957.1
1-2	3 (25.0)	2 (16.6)	7 (58.4)	—	12 (100)	1435.4
2-3	2 (66.6)	—	1 (33.4)	—	3 (100)	666.6
3 and above	2 (40.0)	—	1 (20.0)	2 (40.0)	5	5150.0
All	9 (26.5)	10 (29.5)	13 (38.2)	2 (5.8)	34	1747.8

Note: Figures in brackets are percentages.

lend on the security of gold, replenishing their funds by repledging the gold in commercial banks. The normal period of the loans given by professional moneylenders in this region is three months. On the expiry of the three-month period, the borrower either repays the loan or renews it by clearing the arrears of interest.

Besides professional moneylenders, a number of persons residing in this area and engaged in other occupations, also practise moneylending. They usually are categorised as non-professional moneylenders. It is interesting to note that a good proportion of such non-professional lenders are government employees. They generally lend against the security of land or coconut trees, taken on usufructuary mortgage and sometimes on personal security. The non-professional moneylenders operate partly with their own funds and partly with funds borrowed from banks or even from professional moneylenders.

Friends and relatives constitute another source of credit. The borrowers offer to their creditors, as security, land or coconut trees, promissory note or gold — irrespective of the closeness of their kinship. The friends and relatives advance loans not out of love alone; they charge rates of interest as high as any charged by other types of creditors. These different non-institutional credit agencies cater to identical clientele, accept similar security, and perhaps charge the same rate of interest. Thus the line of distinction, between professional and non-professional moneylenders, friends, and relatives, is blurred.

Quite a few households reported that they take loans from coconut traders who advance loans one or two months prior to the harvest, and recover them by purchasing coconuts from the borrowers at prices considerably

lower than the going market price. Coconut traders have also advanced money in a few cases, on the usufructuary mortgage of coconut trees.

Institutional credit is comparatively meagre in this locality. True, there are two co-operative credit societies in this panchayat; but at present they are in a dormant state. Three branches of commercial banks also function here. But, the vast majority of households have not availed of this source of credit.

Chit funds are another source of credit in this area. Most of these chit funds conducted by local persons are of an informal type. This informal type of local chit funds, with a small scale of operations — in terms of the number of subscribers as well as of the principal sum — really belongs to the unorganised sector of the rural money market. The prize amount received by the subscriber constitutes a loan which is advanced against the security of land or personal security.

We have given above a brief account of the principal credit agencies functioning in our study area. Among them, the non-institutional sources con-

TABLE 9: DISTRIBUTION OF OUTSTANDING DEBT ACCORDING TO SOURCES

Source of Credit	Total Amount Rs	Per Cent
A Non-Institutional		
Professional moneylenders	26,711	8.98
Non-professional moneylenders	1,68,833	56.71
Friends	21,550	7.25
Relatives	7,450	2.50
Traders	11,200	3.76
Chit funds	19,800	6.68
Sub-total	2,55,544	85.88
B Institutional		
Co-operatives	22,500	7.5
Commercial banks	19,675	6.6
Sub-total	42,175	14.1
All	2,97,723	100.0



TABLE 10 : PERCENTAGE DISTRIBUTION OF OUTSTANDING DEBT AMONG DIFFERENT OCCUPATIONAL GROUPS ACCORDING TO CREDIT AGENCIES

Credit Agency/Occupational Groups	Non-Institutional					Institutional					Total
	Professional Money-lenders	Non-professional Money-lenders	Friends	Relatives	Traders	Chit Funds	Sub-total	Co-operatives	Commercial Banks	Sub-total	
Cultivators	10.10	39.58	5.05	—	1.18	8.75	64.66	25.25	10.09	10.34	100
Agricultural labourers	5.83	88.00	3.25	—	1.29	—	98.37	—	1.63	1.63	100
Unskilled non-agricultural labourers	5.22	78.37	8.35	4.63	—	—	96.57	—	3.43	3.47	100
Skilled workers	17.04	42.10	6.81	9.28	—	22.29	97.52	—	2.48	2.48	100
Industrial workers	23.35	32.41	22.12	—	22.12	—	100.00	—	—	—	100
Salary earners	11.59	32.04	8.73	1.97	6.01	16.13	76.47	10.99	12.54	23.53	100
Traders	6.47	59.33	1.36	—	27.23	—	94.39	—	5.61	5.61	100
All	8.98	56.72	7.26	2.50	3.76	6.63	85.85	7.55	6.60	14.15	100

tribute the lion's share of credit, as may be seen from Table 9.

It is seen that professional moneylenders account for only about 9 per cent of the total loans. Presumably, owing to recent changes in the social, economic, and political milieu in the country — which impose greater restrictions on professional moneylending — their number is dwindling. Under the present set-up, non-professional moneylending appears to involve less odium. Thus we found non-professional moneylenders provided the largest proportion of the total debt outstanding, *viz.*, about 57 per cent. Friends and relatives contributed about 10 per cent of the total. Institutional agencies, *viz.*, co-operatives and commercial banks are seen to have supplied only a little over 14 per cent of the total loans. It is significant to note that, even today, non-institutional agencies dominate the credit scene in this area which is more favourably situated than the typical rural areas of the state.

It may be interesting to examine the sources of credit to different socio-economic groups. In Table 10, we attempt to bring out the pattern of distribution of debt among different occupational groups according to credit agencies.

The most significant fact emerging from Table 10 is that the wage-earning class depends heavily on non-institutional sources of credit. Thus, the professional and non-professional moneylenders together accounted for about 94 per cent and 84 per cent of the total debt in the case of agricultural and non-agricultural labourers, respectively. Non-institutional sources of credit claim an overwhelming proportion of total debt in respect of the skilled workers and the industrial workers also. On the other hand, in-

stitutional agencies accounted for a significantly high proportion of debt of the cultivators and the salary earners. Only these two groups could gain access to credit from the co-operative sector; three-fourths of the loans from commercial banks were also utilised by them.

A little over one-third of the total debts outstanding in cultivator households is seen to be from the institutional agencies — *viz.*, co-operatives and commercial banks. It may be interesting to examine the distribution of institutional credit among cultivators of different strata.

It is seen from Table 11 that in the case of the cultivators holding less than two acres over 85 per cent of the outstanding debt is obtained from non-institutional agencies. On the other hand, when we come to cultivators belonging to the top size group the proportion of loans from non-institutional agencies constitutes only a little over 34 per cent. It is important to note that the entire co-operative credit is availed of by this group.

(b) Though, the various non-institutional credit agencies are hardly distinguishable from one another, the loan transactions observed in this area seem to fall into certain clear-cut categories. They are loans based on mortgage of land or usufructs, loans given by coconut traders to cultivators on the understanding that the latter would sell the coconuts to their creditors, and loans advanced to agricultural labourers who undertake to sell their harvest wages (*i.e.*, paddy) to their creditors. The practice of taking loans by mortgaging the ration cards is also found to be quite common in this locality.

(i) Loans taken on the security of promissory notes or gold are the most straightforward. They are formal

transactions and interest is entered in the records. However, the actual interest paid by the borrower may turn out to be considerably higher than stated in the documents.

(ii) Loans taken against usufructuary mortgage of coconut trees are a class by themselves. Usually, small and marginal farmers resort to this type of borrowing. This is a very common type of transaction. Under this system, the creditor gets the right of enjoyment of the usufructs of a specified number of coconut trees until the whole loan is repaid. Generally a registered mortgage deed is executed for a specific period — say, four to five years. However, small loans are issued without such registered deeds. There is no explicit interest involved; the vast majority of borrowers do not believe that they are paying any interest. But the usufructs which the creditor enjoys constitute the interest; since it is not customary for the creditors to incur any maintenance expenditure on the land which passes into their possession, the entire income from the trees should represent net interest on the sum advanced.

(iii) Small cultivators take loans from coconut traders in between the plucking of coconuts, which interval ranges from 45 to 60 days. The loans are advanced against the security of the coconuts which the borrowers are under obligation to sell to their creditors. Invariably the trader takes the nuts at a price lower than the going market price by — say, Rs 3 to Rs 5 per 100 nuts. And the borrower does not reckon with the implicit interest underlying this transaction.

(iv) An important category of loans taken by agricultural labourers is cash loans taken during lean months by pledging their harvest wages. They make the repayment, by selling the



TABLE 11 : DISTRIBUTION OF DEBT ACCORDING TO SIZE OF HOLDING AND SOURCE

Source of Credit/Size Group (in acres)	Profes- sional Money- lenders	Non- Profes- sional Money- lenders	Friends	Relatives	Traders	Chit Funds	Co-opera- tives	(Cultivators) (Total amount in Rs)	
								Commer- cial Banks	Total
0-1	4300 (32.08)	5200 (38.80)	—	—	700 (5.22)	1200 (8.95)	—	2000 (14.90)	13400 (100)
1-2	1700 (9.40)	10375 (57.39)	—	—	—	4000 (22.14)	—	2000 (11.07)	18075 (100)
2-3	—	2150 (100)	—	—	—	—	—	—	2150 (100)
3 and above	—	5800 (22.48)	3000 (11.63)	—	—	—	15000 (58.14)	2000 (7.75)	25800 (100)
All	6000 (10.04)	23525 (39.59)	3000 (5.05)	—	700 (1.17)	5200 (8.76)	15000 (25.25)	6000 (10.09)	59425 (100)

Note : Figures in brackets are percentages.

paddy which they receive as wages for harvesting and threshing operations. The price realised for the paddy is usually lower than the going price at the time of repayment. Here again, the borrowers are not apparently aware of the implicit interest involved in parting with paddy at a discount.

(v) Loans taken by pledging the ration cards used to be very common among the poorer sections of the local community. Amounts varying from Rs 50 to Rs 200 are borrowed from better-off households on the security of the ration cards, the loan amounts varying directly with the number of units registered in the cards. The ration cards will be used by the creditors till the principal is repaid. As far as the borrowers are concerned, the loans appear to be interest-free, but a fairly high interest rate is implicit, which is equivalent to the difference between the control price of rice and its open market price. Of late, the respondents are reluctant to divulge the information on this type of transaction, since ration cards are non-transferrable according to law, however, on the basis of our first-hand knowledge of the locality, we venture to vouchsafe the existence of this system for quite some time.

In brief, in all the categories of loan transactions with non-institutional credit agencies — other than loans taken from moneylenders on the security of ~~and~~ promissory notes where interest payment forms an explicit part of the transaction — interest is realised, though it is concealed in one form or other. That the typical borrower is ~~unaware~~ of the interest implicit in such

transactions was evident from the negative answer we received from the respondents to the question whether they were paying any interest on their outstanding debts. It is significant to note that nearly *two-thirds* of the volume of outstanding debt falls into various categories where interest payment is not explicit, as can be seen from Table 12. (In this connection it may be recalled that the proportion of loans taken at nil rate of interest as reported by the Rural Debt and Investment Survey came to 65.8 per cent in Kerala.)

#### Rate of Interest:

The foregoing discussion has shown clearly that there exists, in this area, a variety of loan transactions which, on surface, are interest-free but where heavy interest is in fact hidden under the rug. Since the implied rates of interest appear in many disguised forms, even the borrowers do not recognise the fact. No wonder, the presence of such implicit interest charges entirely

escapes the net of conventional surveys. The question then arises: how high are these implicit rates? To answer the question, an intensive and patient investigation, which is a time-consuming process, is required. We are at present engaged in such an intensive investigation. A pilot survey, for testing the techniques and tools of investigation, was conducted in a few households covering different categories of loan transactions. The pilot survey threw up results which appeared interesting to us. The results of these case studies are summarised in Table 13.

The first four cases grouped under A are transactions where rate of interest is explicitly stated. Cases 5 and 6 (under B) relate to loans raised on the basis of usufructuary mortgage. The value of the usufructs of the trees mortgaged, forms the interest payment on the loan. One agricultural labourer who had borrowed a sum of Rs 100 by pledging his future harvest wage sold 5.5 *paras* of wage paddy at the rate of Rs 18, when paddy sold at Rs 21 in

TABLE 12 : DISTRIBUTION OF DEBT ACCORDING TO TYPES OF TRANSACTIONS

Category of Loan Transaction	Total Amount (Rs)	Per Cent
A Loans with explicit rate of interest		
1 Loans on the security of promissory note	18,430	6.20
2 Loans on the security of gold	45,200	15.48
3 Loans on the security of land	21,000	7.05
4 Loans on the security of the borrower and third party	21,050	7.07
Sub-total	1,05,680	35.50
B Loans with implicit rate of interest		
1 Loans on usufructuary mortgage of coconut trees	1,55,650	52.28
2 Loans on the security of land	22,700	7.62
3 Loans on the security of coconut	700	0.24
4 Loans on the security of harvest wage	393	0.13
5 Loans on the security of the borrower and third party	12,600	4.23
Sub-total	1,92,043	64.50
Total	2,97,723	100.00



TABLE 13 : CASE STUDIES OF LOAN TRANSACTIONS

	Occupation of Borrowers	Occupation of Lender	Date of Loan	Date of Repayment	Amount of Loan	Purpose	Security	Mode of Repayment		Rate of Interest (Per Cent)
								Principal	Interest	
A Loans with explicit interest										
1	Cultivator	Government Servant	Oct 1974	—	Rs 1000	House construction	Promissory Note	Cash	Cash	36
2	Cultivator	Professional lender	July 1975	—	Rs 200	Consumption	Gold	"	"	36
3	Non-agricultural labour	Cinema operator	March 1975	—	Rs 100	Education	Gold	"	"	60
4	Non-agricultural labour	Mason	June 1975	—	Rs 100	Education	Personal	"	"	60
B Loans with concealed interest										
5	Non-agricultural labour	Government servant	Aug 1973	—	Rs 300	Medical	Usufructs of 3 coconut trees Av yield 300 nuts per year Av price Rs 65	"	Usufructs of coconut trees	65
6	"	"	Dec 1974	—	Rs 250	Consumption	"	"	"	75
7	Agricultural labour	Government servant	"	Feb 1975	Rs 100	Medical expenses	Personal : Promise to repay the loan in next harvest wage received in paddy	Paid 5.5 para of paddy at Rs 18 per para market price Rs 21	Paddy	
8	Cultivator	Trader	May 1975	June 1975	Rs 200	Consumption	Personal : Promise to repay in coconut at the time of the next harvest	Paid 345 nuts at the rate of Rs 58 per 100 nuts. Market price Rs 61 per 100 units	Coconut	60

the market. This left a margin of Rs 3 per *para* or a total of Rs 16.5 for the two-month loan. This works out to an interest of 65 per cent.

The last category, refers to a loan taken up by one cultivator in May 1975, who sold 345 coconuts to his creditor in June 1975, at a price of Rs 56 per 100 nuts (i.e., Rs 3 below the market price) to close the loan. This gave the creditor a margin of Rs 3 per 100 nuts or Rs 10 for the whole deal, yielding a rate of interest 60 per cent per annum.

The case studies presented above raise a number of interesting questions. Is the rate of interest on loans where interest is concealed higher than in cases where interest is an explicit part of the transaction? Is there any relation between (a) the amount, security, and duration of the loans, and (b) the rate of interest? Is there any relation between ability to pay interest and the interest actually paid? The answers to these questions have to await the results of the intensive survey which is under way.

### Conclusion

The foregoing discussion has shown that the non-institutional agencies account for an overwhelming proportion of the credit supply in the study area. This implies that the average rate of interest is apt to be high, much higher than the average yielded by the Debt and Investment Survey. The bulk of the institutional credit is appropriated by a relatively small proportion of households belonging to the upper stratum of families. One of the implications of this pattern of distribution of institutional and non-institutional credit, among households belonging to the different socio-economic groups, is that the cost of credit is inversely related to the economic status of the borrower. The distinction between professional moneylenders and non-professional moneylenders is, in practice, extremely narrow; they are all moneylenders. The non-professional moneylenders — friends and relatives included — cater to the same clientele, take identical types of securities and charge

the same high rates of interest as (if not higher rates than) professional moneylenders.

The results of the pilot survey show that the interest on a good proportion of loan transactions is concealed and that the actual rates of interest are quite high. The sample size in the pilot survey is, of course, too small to draw any firm conclusion. In fact, the limitations of the sample size have to be borne in mind while interpreting the results obtained from the larger survey of 456 households also. In spite of such limitations, we hope our analysis has brought out certain less well-known but crucial aspects of the rural credit market in Kerala, such as the pattern of distribution of credit according to sources and the economic status of the borrowers and the predominance of loans where interest charges are concealed.

### Notes

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nan Nair, in the preparation of this paper. The author alone is, however, responsible for whatever errors that remain.]

1 Bottomley, Anthony, "The Cost of Administering Private Loan in Underdeveloped Areas" *Oxford Economic Papers* 15 (1963a): 154-63.

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2 This stands for the weighted arithmetic mean of the rates of interest calculated on the basis of the data published in the RBI Bulletin, September 1965.

## NATION REGAINS SPIRIT OF ADVENTURE 1975-76

# Progress in Power Output

- All-time high of 79,764 million units generated.  
Record output of 260 million units per day.
- 25 new power units generated 1800 MW, 20 of them between September 1975 and March 1976.
- 2,050,000 hectares of additional, irrigation potential expected to be created this year.
- 6,356 villages electrified, taking the total to 174, 079, 140,000 pump sets energised.



# *Dunlop India Chairman Reviews the Company's Progress in its Golden Jubilee Year*

## **Present Difficulties Will Pass Tyre Industry Has A Good Future**

The following is the text of the speech delivered by Mr. W. N. Scotts, Chairman, at the 50th Annual General Meeting of Dunlop India Limited, held on the 25th June, 1976, at Calcutta.

I have pleasure in welcoming you to the 50th Annual General Meeting of your Company. This marks the Golden Anniversary of Dunlop India Limited and it is an important milestone in the life of any Company. We were incorporated as an Indian Company on the 19th August, 1926 and the passage of time has seen your Company grow to be one of the larger industrial units in the Private Sector of the Indian economy.

As the Directors' Report and Accounts for the year ended 31st December, 1975 have been in your hands for some time, I would like, with your approval, to take these as read.

### **From Shortage to Surplus: A Year of Profound Change in the Tyre Industry**

1975 was a year of profound change for the Industry with a transformation from a situation of shortage to one of surplus. A number of factors contributed to this — the overall improvement in the availability of energy in the second half of the year, better availability of raw materials and the achievement, by a new entrant, of full scale production — but the main factor was reduced market demand. The control of inflation and the withdrawal of unaccounted money eliminated the hoarding of tyres for speculative purposes, and restrictions on credit also contributed to a de-stocking operation and a consequent reduction in current demand.

In the year under review, the Industry produced a total of 5.5 million automotive tyres, which was only marginally higher than the 1974 figure, but by year end manufacturers were holding large stocks of finished goods and there was pressure on their liquidity. The Industry is derived from and dependent upon the demand for transport, both public and private, and the demand for transport is dependent on the general level of the economy. At a generally reduced level of economic activity, the Railways, operating with greater efficiency, were able to carry a higher percentage of the total tonnage required to be moved, thus reducing the demand for road transport. All this happened at a time when the Transport industry was incurring unprecedented cost increases arising directly and indirectly from oil price escalation.

In 1975 the Tyre industry was also adversely affected by reduced production levels of cars and other light vehicles:

### **14% Rise in Sales**

The total income of your Company reached Rs. 167.44 crores, representing an increase over 1974 of 14%, almost all of which was due to higher selling prices.

In the Automotive Tyre market there was a considerable change in the pattern of demand and we sold reduced quantities of car and light truck tyres. There was, however, continuing demand for heavy truck, tractor, motor-cycle and scooter tyres, as well as tyres for animal drawn vehicles.

The demand for our range of Industrial Products was satisfactory and for Rubber and PVC Conveyor Belting and Fan and Vee Belts, the production capacity/licensed capacity was the limiting factor. In the case of both Rubber and PVC Conveyor Belting, the country had to augment local production by imports at considerable expenditure of foreign exchange. We have submitted proposals for increasing our production of these products to Government and we hope these will receive a favourable and quick response and will enable us to assist in reducing the necessity for further imports.

In last year's Report I commented on the reduced demand for Dunlopillo and attributed this partly to the high level of excise duty and partly to the 'sluggishness in consumer markets reflecting the general level of the economy. Demand fell even further in 1975 and we decided to phase out our production.

We also ceased production of cycle rims at Ambattur and concentrated production at the Sahaganj factory. There was a reduced domestic demand for rims and higher overseas freight costs have reduced the export opportunities for this light but bulky product.

### **Record Exports of Rs. 7 Crores Despite Keen Competition**

International price competition in export markets was very keen in 1975 and this was particularly true of the automotive tyre market which right around the world, has been depressed by the same factors that affected India. There was a down turn in some sectors of our export markets, but we achieved increased sales of heavy truck tyres and the total value of automotive tyre sales rose by more than 11%. In achieving this record result we were considerably assisted by the international recognition and reputation of our brand name and the support of the Dunlop Group's international organisation.

As well as promoting the sale of our own manufactured products, we were able to increase substantially the export sales of products from the small and medium scale sectors. Apart from finding overseas markets, we have also been able to provide design and technical help to some of the smaller units so that their products might find more ready acceptance abroad. During the year we were able to increase the number of countries to which we export by three, to a new record total of 95.

Overall, we reached a record export turnover of just over Rs. 7 crores, an increase of 32% in a difficult year.

Government has asked that we accept a very much higher target for 1976 and we will make every effort to meet this challenge and assist the country's foreign exchange earn-



July 3, 1976

ings. At the same time, Government has arranged for access to imported raw materials needed for export production, the provision of natural rubber at international prices and a limited degree of financial incentive to help offset the very real disabilities, i.e., higher shipping and raw material costs, that we experience by comparison with our international competitors. These measures are appreciated by the Industry, but it is important that continuity be given to such arrangements to enable Indian exporters to commit themselves to export quotations on a longer term basis than has been possible in the past. This is critical if our export effort is to be sustained in the face of growing international competition.

#### **CAPEXIL Award for Outstanding Export Performance**

In recognition of our export achievements, we were honoured to receive a number of export awards in 1975.

These included Certificates of Merit from the Ministry of Commerce, Government of India, for the best exporter of Bicycle Rims 1972-73, Rubber Tyres and Tubes 1973-74 and a Certificate of Export Recognition from Capexil in regard to Automotive Tyres and Tubes, Cycle Tyres and Tubes and Rubber Belting 1973-74.

We were especially honoured to receive the Capexil Special Award for outstanding export performance and promotional activities 1974-75.

#### **Power**

During 1975 we again faced the problems associated with an insufficient supply of electrical energy.

At our Ambattur factory near Madras, we were subject to a 60% power cut imposed in early January and the position deteriorated even further until late in June when full power was restored.

In these circumstances, it was inevitable that we suffered a loss of production.

At our Sahaganj factory in West Bengal, we worked under power rationing and were able to operate only 16 shifts per week instead of our normal 18. We were also subject to a reduction in maximum demand but, fortunately, this has now been lifted in respect of night shifts.

Despite these restraints, we were able to increase output at Sahaganj to offset the decrease at Ambattur. Overall we produced slightly fewer automotive tyres than in 1974 and again gave priority to those products where the national need was greatest.

The availability of critical raw materials was very much easier than in the recent past and we experienced very few difficulties in this regard. We appreciate the assistance given by our suppliers who, faced with their own problems, were able to maintain supplies to us.

Comment was made in our last Report that we were seeking to instal some generating capacity and by mid year 1976 we expect to be able to provide 35% of our Ambattur power requirements and 20% at Sahaganj. In the event of future restrictions on the supply of electrical energy, we will be able to reduce the impact of such measures.

#### **Worker-Management Co-operation to Implement 20-Point Programme**

Throughout the year we experienced satisfactory industrial relations and it is pleasing to report that there is evidence

of a renewed spirit of co-operation in the joint efforts of both workers and management to improve productivity.

It has long been our policy to involve workers' representatives in consultation, and our aim is for participation and co-operation to foster more responsible attitudes by all concerned and to avoid confrontation either by management or workers which can lead only to damage to all.

I would like to pay tribute to all of our people who worked so hard to overcome the disabilities of the power supply situation and difficulties in other sectors. I am confident that a continuation of this same spirit will enable us to improve further our contribution to the economy and to implement truly the spirit of the Prime Minister's 20-point programme.

One factor, however, continues to be a problem and that is absenteeism which is often a restraint on production. The provision of sufficient additional labour to offset serious absenteeism can only lead to over-manning and this has serious implications in today's competitive situation. This danger is sometimes insufficiently appreciated by those whom it may ultimately affect.

#### **Improved Profits Through More Efficient Utilisation of Resources**

A slightly higher overall volume of production, changes in product sales mix, the full year impact of revisions to selling prices made in 1974, and our continuing drive for economies in manufacturing cost and more efficient utilisation of our manufacturing resources have led to improved profitability.

The emergence of a competitive market situation has resulted in our having to carry a substantially higher finished goods inventory and a much greater level of customer outstandings than in the past. This has resulted in very much higher borrowings for working capital and a consequent increase in interest costs which rose by more than 50% over the previous year. This situation seems likely to continue into the foreseeable future and an urgent re-examination of the inventory norms set by the Tandon Committee for the Industry is called for.

Costs of distribution and of selling and administration were contained at the same percentage of Turnover as in the previous year.

The raw material cost escalation of 1974 continued into early 1975 and some selling price adjustments were necessary during the first half of the year.

#### **Technical Collaboration with State Industrial Development Corporations**

The Technical Collaboration Agreements signed between the Industrial Development Corporations of West Bengal and Andhra Pradesh and Dunlop Limited, U.K. have now been taken on record by the Government of India and the two State Corporations are taking steps to implement these projects.

During 1975 your Company signed a Technical Consultancy Agreement with WEBSTAR, the Company incorporated to implement the West Bengal project, and a similar Agreement with Andhra Pradesh is under negotiation. Under these Agreements, Dunlop India Limited will provide Technical/Engineering services to enable the new factories to be erected and commissioned on the basis of the know-how provided in the U.K. in the terms of the Collaborative Agreement.



## Modernisation of Sahaganj Factory Reaffirms Our Faith in West Bengal

Our Sahaganj factory in West Bengal was the first Automotive Tyre plant to be established in India and we commenced production in 1936. Over the past 40 years, the factory has grown in size and complexity and in 1975 we set ourselves the task of reviewing its layout and its equipment to determine what was needed to ensure its continuance as a viable unit. As a result, we have put in hand a phased modernisation programme which will include replacement of existing steam boilers (which will still be coal fired), the installation of the most modern tyre curing equipment and the up-dating of ancillary equipment. This machinery will be made almost entirely in India. At the same time, we are reviewing the implications for our existing Industrial Licences and those Letters of Intent already held by us.

This programme of revitalisation must enable us to improve the productivity at Sahaganj without which the expenditure would be uneconomic.

Many industrial units have become uneconomic in the past and although a number of factors may have contributed to this position, it is likely that a major cause has been an inability or unwillingness to re-invest, and thus maintain or improve productivity and up-date the product range to suit the changing needs of the market.

There are many financial incentives available for the establishment of new factories in backward areas and this is a commendable policy. At the same time, it is my contention that equal incentives should be available to those organisations willing to substantially re-invest in existing units, particularly those already established in backward areas.

With our modernisation programme at Sahaganj, we are reaffirming our faith in the future of West Bengal as a major industrial area and we look forward to receiving the co-operation of those bodies that subscribe to our outlook.

### Dunlop Plans to Set Up India's First Aero-Tyre Retreading Plant

We have for some years made a wide range of aeroplane tyres at Sahaganj and these meet virtually the whole requirements of our international and domestic airlines, as well as those of our defence aircraft. It has hitherto been necessary to send these tyres outside India for retreading, but we now propose to set up modern aero-tyre retreading facilities at Sahaganj. This will result in significant savings in foreign exchange.

### Need to Keep Pace with International Technological Development

So far as current production is concerned, we are making no remittances whatsoever in respect of overseas technical aid, even for our most sophisticated products. Despite our desire to remain as self-sufficient as possible, there is a continuing need to keep pace with international technological development, and it is our hope that the Government of India will permit us to make proper and necessary payments for the transfer of new technology beyond the level that exists in our Industry in India today.

### Research and Development at Dunlop

The integrated R & D unit at our Sahaganj factory continues to work on the evaluation and development of new materials and the evolution of new designs and new me-

thods of manufacture to provide the products for the changing requirements of our markets at minimum cost to the consumer.

### The Discharge of Our Social Responsibilities

The need for an awareness of social responsibility is a matter attracting considerable comment at the present time, and I think it proper that I should review the situation as I see it in Dunlop India Limited.

I consider that the prime pre-requisite to enable us to meet our social responsibility is the ability to make a sufficient margin of profit from our operations which, in turn, enables us to meet the reasonable expectations of customers, employees and shareholders, as well as those of the other important stakeholder in our business, the society in which we live.

### Maintaining Business in a Viable Condition: Our First Social Responsibility

I thus see our first social responsibility as maintaining our business in a viable condition and a commitment to this concept can be seen in our re-investment programme at Sahaganj. We then need to balance the costs of meeting the expectations of our various stakeholders because too great an emphasis on any one sector could result in detriment to others.

We try to be a contributory member of the society in which we live and we express this in many ways.

We give assistance to many organisations concerned with the care and uplift of the less privileged sectors of our society and particularly those working for the rehabilitation of bustee areas. Similarly, we support education for the disabled, organisations concerned with management education for young people and a wide range of recreational and cultural activities.

### Dunlop Serves

As a Company concerned with the Road Transport industry, we feel that we have a special responsibility to promote safer habits for road users and, in that regard, we collaborate with the Police in the promotion of road safety education.

### Generation of Employment Through Swadeshi

We have aided the generation of employment opportunities in related industries by the impetus we have provided for the indigenous development of the materials used by the rubber industry, and the assistance we have given in the design and construction of locally made rubber and tyre making equipment has made a substantial contribution to self-sufficiency in this field. We were a pioneer in the introduction of proper grading for indigenous natural rubber and continue to give support for the further development of this important raw material.

At our major factory at Sahaganj, Hooghly District, we house many of our workers and their families within the Dunlop community there, operate schools in Hindi, Bengali and English mediums and provide the facilities for co-operative stores and a wide range of recreational and cultural activities.

### Remarkable Progress of Family Planning at Sahaganj

A particular feature of our Sahaganj community is a fully equipped and competently staffed hospital, which not only provides medical and surgical care for our own Dunlop family but also, through our out-patient clinics, provides



medical care for a total of about 30,000 people. Ante and post-natal services and family planning are integral parts of our health services and the average family size within our community is now about half of what it was 14 years ago. Research is also undertaken into the incidence and prevention of industrial accidents and into industrial health, and the benefits of this research are made available to others.

We started manufacturing in India some 40 years ago when we employed about 1,500 people. Today we employ nearly 12,000 in our factories, offices and godowns, providing good opportunities for their training and development. Additionally, many more thousands derive their living from the goods and services they provide to us.

Responsibly managed large companies provide a source of strength in the economy of the country and many of them make a substantial contribution to the well-being and progress of society as a whole. Your own Company, a unit of a large international organisation, is fully aware of its social responsibility: it has tried to live up to these ideals in the past and will continue to do so in the future.

#### **The Present Difficulties Will Pass: Tyre Industry Has A Good Future**

There has been considerable speculation about the future prospects for the existing units within the Industry and the likely impact of the new factories that are expected to come into production in the next 12 months. Additionally, there are other Letters of Intent which have yet to be converted into Industrial Licences and it seems likely that some of these may be implemented over a longer period than originally envisaged.

1976 opened with a large stock of unsold tyres all around the country and with many tyre factories working at below maximum capacity. Whilst industry in general, and the public sector in particular, have responded to the call for increased output, the missing factor has been demand.

Demand management has rightly and effectively been used as a measure to combat a destructive inflation rate, but the time had come when the continuation of these policies would have resulted in under-utilisation of resources and stagnation in the economy. Recovery in demand should now be assisted by the growth-oriented Budget with its large increase in plan outlay and its encouragement for savings and fresh investment.

The manufacturers of cars and jeeps and the road transport industry in general were experiencing recessionary conditions.

The reduction in excise on cars and jeeps, together with the abolition of excise on tyres, tubes and batteries that are originally fitted, will provide a measure of relief for that sector.

The increase in rail freight rates to more economic levels will marginally assist the competitiveness of the road transport industry which seeks to regain the volume of freight it held in the recent past.

The stimulus of both of these measures would, however, be more than offset if the provision in the Budget to increase excise rates for fuel for both cars and trucks was in fact, implemented.

Real stimulation for both vehicle manufacturers and the road transport industry will come mainly from the projected uplift in the general economy and the tyre industry will depend upon the same factors.

The maximum utilisation of existing investment and of re-investment in this sector will assist in meeting future demand, as will the two new units now coming up, and should ensure a comfortable supply position in the next two or three years. By the end of this decade, however, there will be a need for more capacity than that presently installed or under construction and because of the lead time involved, it would seem that fresh investment decisions will need to be made even although present prospects look less attractive than in the recent past.

The present difficulties will pass and, longer term, the Industry has a good future.

#### **Quality Products and Sound Trading Policies: Our Strength in 1976**

With the current level of demand still below present capacity, a strongly competitive situation has developed.

We have intensified our export efforts and are presently achieving higher sales of automotive tyres than in the same period last year. In February 1976 we rationalised the selling prices of some of our tyre range giving the maximum consideration to vehicle manufacturers and to the State Transport sector. Whilst some raw materials have recently showed easier trends, the costs of many other inputs continue to rise and selling prices will be kept under review.

We expect a competitive situation to prevail during the whole of 1976 but that demand will pick up as the general level of the economy reacts to the stimulus of the Budget. Our wide range of good quality products and our sound trading policies will continue to be a source of strength in 1976.

*Note:* This does not purport to be a record of the proceedings of the Annual General Meeting.





# The Madras Aluminium Company Limited

## Shri R Venkataswamy Naidu's Review

THE following is the address to members of the Company delivered by Shri R Venkataswamy Naidu, Managing Director, at the 16th Annual General Meeting of The Madras Aluminium Company Limited held at 'Shanmuga Manram', Race Course, Coimbatore-18 on Monday, the 28th June 1976:

I welcome you all to the Sixteenth Annual General Meeting of the Company.

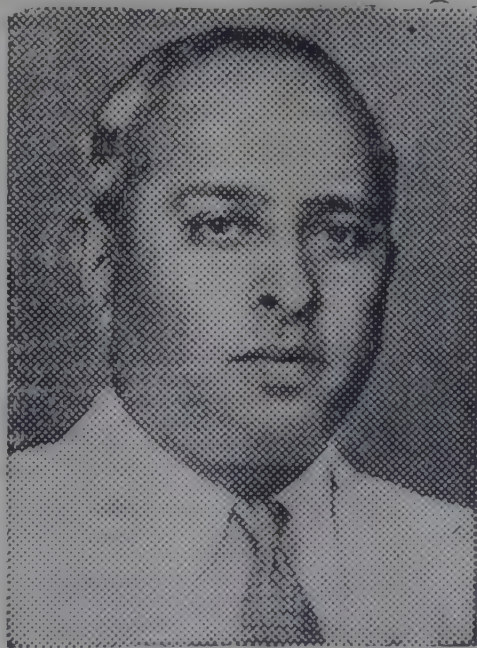
At the outset, I request the Members to observe a minute's silence as a mark of respect to the memory of the late Bharat Ratna Shri K Kamaraj. In him the country has lost a great patriot, a leader of the masses and one who rendered yeoman service to the country and the people throughout his life. As you are all aware, he was instrumental in setting up the aluminium industry in the State.

During the year 1975, your Company had to face serious difficulties on account of critical power position and low realisation for its products. The power cut amounted to 75 per cent during part of the year. The production losses amounted to nearly 5,000 tonnes and the company had to spend nearly Rs 40 lakhs to re-start the plant.

During July 1975, the Government of India announced the New Integrated Aluminium Policy by which the electricity tariff was revised upward for the aluminium industry and the new dual pricing policy was devised. Under this policy, our electricity rates went up by nearly four times. At present we have to supply 50 per cent of our production as levy metal at prices which do not take into consideration depreciation and profit on invested capital. These are expected to be covered by the sale of non-levy metal for which there is no price control. Unfortunately, due to the high cost of the metal, increase in excise duty and the general economic recessionary trend, consumer resistance developed and the stocks started piling up. At one stage, the producers in the country were holding stocks of over 35,000 tonnes. Your Company's stock also went up to over 3,000 tonnes. Consequently, the Company's working finance got reduced and additional bank finance had to be arranged and high interest rates had to

be paid on the liabilities to suppliers and repayment of term loans to financial institutions had to be rescheduled. In spite of these very adverse conditions, the Company was able to avoid incurring cash losses due to prudent management measures.

The Company's performance during the first half of 1976 is far from satisfactory. In order to improve the demand for the metal, the Government of India reduced excise duty on non-levy metal by Rs 1,200/- per tonne in March 1976. In order to enable the producers to reduce their huge stocks, they also permitted the export of 20,000 tonnes for 1975-76 period and an initial 15,000 tonnes for 1976-77. In order to reduce stocks, we also exported about 2,000 tonnes of metal, incurring considerable cash losses.



Shri R Venkataswamy Naidu

In this context I wish to refer to the export policy of the Government of India for virgin aluminium. After a lapse of 6/7 years, the Government of India permitted the export of aluminium in limited quantities, i.e., 35,000 tonnes. I understand that the Government of India are likely to review the position at a later stage regarding permitting further exports. When the Indian producers exported the metal, they had to do so at considerable cash losses ranging from Rs 500/- to Rs 1,500/- per tonne. However, at present there is a pick up in the price in the international market

and by the end of this year the price for aluminium in international market is expected to rise considerably. Hence, I appeal to the Government of India to reconsider the matter and to permit exports of aluminium in order to sustain the foreign markets for future years and also to earn valuable foreign exchange.

I am aware that you are seriously concerned about the future of the Company as it has been facing setbacks continuously ever since 1973. I wish to assure you that your Company has a bright future in spite of the temporary setbacks. Aluminium being the most important non-ferrous metal, in view of the abundantly available resources of bauxite in the country, has a very important role to play in the nation's economy.

As you are aware, we have installed facilities for production of 25,000 tonnes per year of primary metal. Our capacity on the basis of power availability is only 22,000 tonnes at present. Though the Government of Tamil Nadu have sanctioned 94 MVA to our smelter, they have only made available 67 MVA so far due to inadequate line and transformer capacities. The additional power is expected to be made available before the end of this year.

The Members will be glad to know that the Company has finalised its agreement with Scal GP of France for the acquisition of know-how for manufacture of the Sheet Casting Machine and the manufacture of sheets, utilising continuous casting technique. We have already successfully completed trial runs of a sheet casting machine of a smaller size and we have trial marketed about 70 tonnes of sheets produced out of this caster. We have programmed to start commercial production of sheets during the later half of this year. Our project work on extrusion press is at an advanced stage and we are negotiating with the suppliers for minimising the import requirements. Hence, I once again wish to reiterate that, with the general improvement in the economic climate in the country, with the availability of power for full production of 25,000 tonnes and with the diversification of



plans on hand, your Company has a bright future.

Before I conclude my speech, I wish to thank the Government of India, Government of Tamil Nadu, our Col-

laborators, M/s Mediobanca, Government Financial Institutions and our Bankers for their continued co-operation and for the help rendered to us. I also wish to pay a tribute to our em-

ployees at all levels for their devoted service.

*Note:* This does not purport to be a record of the proceedings of the Annual General Meeting.

## CHAIRMAN'S SPEECH



# Alembic Chemical Works Company Limited

BARODA

## A Period of Good Performance and Results Industrial Licences for New Products Received

**Speech of Shri R B Amin, Chairman, Board of Directors at the 69th Annual General Meeting of Alembic Chemical Works Company Limited, held at Baroda on Tuesday, 29th June, 1976.**

Ladies and Gentlemen,

I have pleasure in welcoming you all to the 69th Annual General Meeting of the Company.

The accounts for the year ended 31st December, 1975 and the Directors' Report have been circulated to you in advance and with your permission, I shall take them as read. As you will note from the profit and loss statement, sales have risen from just about Rs 20 crores in 1974 to well over Rs 23 crores in 1975. This increase of 16 per cent was achieved by sustained effort in a period of sharp recession with the earlier part of 1975 also overcast by the effects of the drought in 1974. The headlong increase in costs because of hyper inflation in the economy came to a partial halt during the latter part of 1975. Expenditure in the Company was also kept under close scrutiny; policies and procedures set up for keeping a check on inventories and capital expenditure and for improving operational efficiency proved effective. You will be happy to see the overall improvement in the performance of the Company for 1975 and we have been able to maintain this tenor and tempo during the current year.

Shortages and irregular supplies of important raw materials like tetracycline, prednisolone, hydrocortisone and procaine hydrochloride adversely affected the production and supply schedule of formulation items in 1975. The position is comparatively easier during this year. The long awaited licence

for our non-narcotic antitussive remedy which will be marketed as Respinex Expectorant has now come through. Recently, we received a licence for the basic manufacture of calcium sennasoides, which has a good export potential. Your Company has also obtained clearance for four other formulations, one useful as a diuretic and the other three for the treatment of hypertension, diabetes and inflammation respectively. This group of drugs helps in our attempts at widening the range of modern medicines manufactured by your Company. One must, however, observe that the clearance of these applications one by one, even under the present revitalised procedures, does take considerable time, both ours as well as that of the Government. This time and energy could be saved on both sides if formulations could be freed from licensing procedures. If any link or condition regarding the manufacture of basic drugs is to be kept, this should be in terms of a certain percentage to the turnover of formulations, as suggested by the Hathi Committee. This suggestion was made over one year ago and it would be in the overall interest of the country if Government take steps to implement it at an early date. The proportion of basic drugs manufacture to the turnover of formulations is about 23 per cent for your Company. This should entitle us to go in for any formulations which we can formulate and market best in the light of our formu-

lating facilities and distribution network.

You are aware of our close and continuous involvement and interest in the development and manufacture of basic drugs. We would very much like to pursue this line of policy and action in the future as well. It is, however, an area which involves long drawn effort and input in terms of trained and talented manpower, expensive equipment and materials as well as uncertain waiting period before something significant and viable emerges. Raising and commitment of funds for this purpose have become increasingly difficult because other more attractive avenues are open to investors. If, therefore, we have to retain the capacity and will for the manufacture of basic drugs, we shall need a system in which returns on such investment are made sufficiently attractive and incentive oriented. In this inherently uncertain and risky sphere, it is essential that an incentive oriented approach regarding price fixation and return on investment is adopted and established. One can be sure that this approach will yield excellent results in terms of increasing the range of basic drugs manufactured within our country and giving a fillip to self-sufficiency and self-reliance. It will also increase the volume of production and degree of competition in pharmaceuticals and thereby give a better deal to a larger and larger number of our people in need of medical care and treatment. While



on the subject of widening the availability of drugs among our people, one must note with regret the increase in excise duty on proprietary medicines from 7.5 per cent to 12.5 per cent. These are generally medicaments used by common people for common ailments and deficiencies; an increase in this tax burden is unwarranted because

it is a disincentive to health care. We hope Government will take the first opportunity to rescind this impost.

Before concluding my Statement, I place on record my appreciation of the hard work put in during the past year by the workers, the staff and the executives of the Company. I also thank my colleagues on the Board of Direc-

tors for their co-operation and assistance.

I now commend the Annual Accounts and the Directors' Report for consideration.

*Note:* This does not purport to be the report of the proceedings of the Annual General Meeting.

## COMPANY MEETING

# Mahindra UGINE Steel Company Limited

## Statement of the Chairman, Mr Harish Mahindra

Following is the statement of the Chairman, Mr. Harish Mahindra to Members on the occasion of the 13th Annual General Meeting of the Company held in Bombay on the 28th June, 1976.

THE Emergency declared in June last year was in many respects a catharsis. There have been many gains from this drastic measure. It has brought about disciplined conduct in public life. It has enabled the initiation of progressive socio-economic policies.

Since the middle of last year, there have been other important gains including political and economic stability, which are so pivotal for progress and which constitute a bulwark for rapid growth. In this sense, in the past a heavy price has been paid in terms of lapsed time by indulging in the luxury of disturbance and disorder. Having performed this quantum-jump from chaos to order, let us resolve that there will never once again be an atavistic reversion to the politics of turbulence.

Business has been successfully interacting with the Government and there are no major differences of opinion between the two as regards the broad aims and objectives of economic growth. But in the formulation and implementation of policies in respect of complex issues, it is not unexceptional that there is no unanimity. Nevertheless, there is a frank exchange of views between the Government and Business at every point of contact. There is also a general undercurrent of liberalism in most Government policies. It is the business of Business to take full advantage of the present helpful situation and boost industrial investments. Our latent promotional capabilities must be stretched to the maximum extent.

While the climate for rapid advancement in the economic field is now

most conducive, there are, however, a few policy areas where clearer thinking is required. For instance, the price situation appears to be the arbiter in much of decision-making in regard to pulling industries out of dull business conditions as well as in regard to quickening the tempo of growth and development. The Government itself has acknowledged the state of listlessness in several ways, such as by the introduction of fiscal measures to provide relief and to expand demand, increasing the plan outlay for Centre, State and Union Territories by an unprecedented 31.6 per cent in the current year over the previous year, liberalisation of imports to actual users and exporters and so forth. What needs to be underlined here is that although the proposed outlay for 1976-77 of Rs 7,852 crores constitutes the largest step-up in investments, nevertheless during the last two years of the Fifth Five-Year Plan as much as Rs 18,588 crores would have to be raised or an average of Rs 9,294 crores during the two year period ending 1978-79, if the Fifth Plan outlay of Rs 37,250 crores is to be met. This would pose a formidable challenge not only to the Government but also to the private sector, from which during the Fifth Plan period there would be a net transfer of resources of as much as Rs 14,000 crores. The point here is that Industry could be said to be poised for rapid growth only when they have no short or long-term problems of serious under-utilisation of established production facilities. This aspect has not received the attention it really warrants. Secondly, there is as yet no

Fifth Plan document delineating these issues so that the units and individuals both in the Public and Private Sectors may brace themselves to the tasks ahead. Thirdly, it was a totally different set of circumstances, high speed inflation in particular, that decreed a package of stringent measures, which I have mentioned earlier. Although the objectives of anti-inflationary strategy have been achieved, this has not been without a sacrifice of buoyancy in the economy and a contraction in economic activity, the tell-tale signs in this respect being the post-haste fall in the demand for a number of items like steel, cement, fertiliser, textile and others. Therefore, keeping in mind the leads and lags that revival measures involve — longer than those of deflationary measures — a retuning of the economic policies particularly those relating to credit restraints and interest rates brooks no delay, especially for purposes of hastening the expansion in economic activity. It should be added that while enforcing the Tand-on Committee norms, a special effort may be made not to leave out of account the peculiar difficulties of individual borrowers and where there is justification, a relaxation may be made in such norms. At the same time the Banks may be free to oversee the end-use to which the credit has been put.

### WHITE PAPER ON STEEL

Earlier this year, in my capacity as President of the Federation of Indian Chambers of Commerce and Industry, I had emphasised the need to think in unconventional terms to promote India's development. In this context,



I had suggested that to bring about a transformation of our predominantly agricultural economy into an industrial one, we must have an ambitious 10-year plan providing for 100 million tonnes of steel, 200 million tonnes of cement, 250 million KW of electricity generating capacity and so forth. It is heartening to note that the Government themselves are thinking along the same lines. In the White Paper on the 25-year roll-on development plan of the Iron and Steel Industry laid on the table of the Parliament last month, a tentative target of around 75 million tonnes of steel-making capacity by the end of the century has been hinted at. The investment cost per tonne would amount to as much as Rs 14,000 in 1993-94 as against Rs 4,600 in 1974-75 at the present rates of inflation. However, it would be misleading to give a per tonne capital cost of Rs 4,600 or Rs 14,000 or any other figure without mentioning the nature of the post-ingot stage facilities intended to be created, inasmuch as the product-mix has a bearing on the capital cost.

#### ECONOMICS OF EF OPERATIONS

The role of the Electric Arc Furnaces, which at present have an installed capacity of about 3 million tonnes and a licensed capacity of 5.5 million tonnes (liquid metal) in augmenting production appears to be de-emphasised for two reasons. Firstly, even at present there is an acute shortage of scrap, availability being of the order of 2.2 million tonnes and requirements, if the furnaces are worked to full capacity, being almost double that. The units in the Electric Furnace Industry have been working constantly under the fear of soaring scrap prices every time capacity utilisation in the Mini Steel sector goes up beyond 40/50 per cent. As a solution to the emerging shortage, a far-sighted decision has been taken for setting up a string of sponge iron plants all over the country. Assuming that by 1985 all the licensed capacity of 5.5 million tonnes would have been installed and there would be adequate availability of power and the feedstock of scrap/sponge iron, to work such units to their full rated capacity, the EF Industry inclusive of the Castings and alloy and Special Steel sectors should be able to contribute about 4.5 to 5 million tonnes (depending upon the progress in implementing the projects) or between 25 to 35 per cent of total steel production.

In about 5 years when the Bombay

High yields 10 million tonnes of crude oil and when gas from the Bassein structure, where large volumes of reserves have been discovered, would also be tapped, there would be an abundance of this strategic fuel and energy source. This potential surplus has awakened interest in Midrex and HyL Direct Reduction Processes based on natural gas, inasmuch as, they would provide a solution to the appropriate use of such a bonanza. The authors of the White Paper, from this angle, should be commended for alerting the authorities that they should be ready with Sponge Plants by the time gas starts flowing, which according to the Minister for Petroleum, would be not later than 2/3 years.

For the Electric Furnace Industry, the year 1975 was a very difficult and trying one. Over a hundred units shut down their operations, being not able to find a market for their products. They were priced out of their stronghold, viz, Bars and Rods market by the Integrated Steel Plants. After numerous representations to the Government in regard to the inherent cost handicap of the Electric Furnace Process, the Union Government took a sympathetic view in November last year and reduced the effective rate of excise duty on ingots produced in Electric Furnaces from Rs 200 to Rs 50 per tonne. There is ample justification for elimination of the whole of the balance of the excise duty of Rs 180/- on Electric Furnace products, inasmuch as they are made out of Steel Scrap, which in its prime steel condition has already borne its full share of the excise burden. The Government has actually accepted this logic by totally exempting from excise duty products of the Re-rolling Industry made out of Re-rollable scrap, inasmuch as the burden of excise duty had already been imposed on such scrap when it was prime steel. Just because the process of recycling is much longer in the case of EF Industry, there is no justification for not going by the same logic.

In this setting, the January 1976 decision of the Supreme Court in the case of the State of Tamilnadu V/s Pyarelal Malhotra, setting aside the award of the Madras High Court and restoring the orders of Sales Tax authorities would not only impose a fresh burden on the Electric Furnace units, but would also push up their prices making their products still more unattractive and uncompetitive. It has now been held that iron and steel

manufactures even if they are made out of ferrous scrap material which has already borne the Sales Tax in one way or the other could be taxed again. Manufacturers and dealers would not be entitled to the customary resale claim albeit the fact that the different sub-entries belong to one single category of 'declared' goods viz, iron and steel. At one stroke this new burden has taken away a sizable chunk of the benefit derived by electric furnace units by way of reduction in excise duty from Rs 200 to Rs 50 per tonne.

Excise duty relief, the lifting of the restrictions on construction activity, the slightly better price realisation for electric furnace products in recent months and a couple of other favourable developments have not so far served to resuscitate Mini-steel units and they continue to languish. The increasing trend in the prices of scrap over the past 4 months has not made it any the easier for them to start afresh. The loss in terms of employment, national income, revenue to the Government, and delays in the repayment of loans and interest to term-lending institutions/banks and so forth are by any criteria grave and pressing issues that call for urgent aid to restore health and vigour. A package of policy measures including financial succour, cash incentives for exports and total exemption from excise duty and sales tax at the product-stage would definitely revive this vital segment of the Steel Industry.

Diversification of the product-mix of the Mini-steel units into Alloy and Special Steels as a solution to the crisis in the Industry is firstly not always feasible on account of several practical constraints such as lack of funds for additional technical inputs as well as for sophisticated plant and equipment and others. Secondly, according to the estimates of the Ministry of Steel themselves, where such diversification is feasible, the market for Alloy and Special Steels being limited, it would very soon be saturated with supplies, even if a fraction of the total number of units opt for such diversification. As it is, the existing and established units in the Alloy Steel Sector are faced with the problem of unlifted finished products and lean order books.

In this somewhat disheartening situation, one welcomes the appointment of two well known consultancy firms for the purpose of undertaking an in-depth study of the technical inadequacies, requirements of balancing



equipment and other related issues. It should be hoped that their recommendations would improve our insight into the nature of the problems and particularly, how best the immediate and long-term development programmes of the tonnage steel plants can be interlaced with those of the Mini-steel units. Also the announcement regarding the proposed creation of a separate cell for the Mini-steel units in the Ministry of Steel has not come a day too soon. The cell should enable the Government to bestow special attention on the plight of the units and come forward with relief measures more promptly.

The wide gap between the requirements of scrap and its availability is not only in the case of the higher density categories of steel scrap but also in respect of those on the merit list for export purposes. Besides the better use of all available indigenous scrap, this predicament would necessitate its improved collection and recycling as also imports of substantial quantities thereof. Under these circumstances it is puzzling as to how one could come forward with a suggestion to relax the present export curbs! The suggestion if implemented would be detrimental to the EF units in more ways than one. Exports would not only accentuate the requirements-availability imbalance but would also push the scrap prices up to the exorbitantly high levels of mid 1974, adding still more units to the sick and infirm list.

In regard to imports of melting scrap which is likely to become a sheer necessity if demand for the products of the Industry picks up and the power position is satisfactory, it must be pleaded that since so far there have been no imports and the present duty of 40 per cent on scrap has been only a paper source of revenue and has not yielded any revenue to the exchequer, it might as well be scrapped. Imported scrap should also be inexpensive if it has to be used at all. It is advisable that the MSTC through which imports are canalised in consultation with the Industry draws up a plan for scrap imports after duly satisfying itself about the quantum of the emerging scrap shortage.

#### POWER

As against the average power deficit of about 3 per cent in the country, Maharashtra has a deficit of more than 5 per cent. In absolute terms the shortage of power in Maharashtra is reported to be about 2 million KWH per day. The power cut in the State con-

tinues to inhibit production and viewed from a perspective planning angle, the shortage of power in the State is likely to assume alarming proportions in the years to come, unless steps are taken on a war footing to increase the power generation in the State by establishing superthermal stations. Sooner the integrated grids are created, greater would be the flexibility for diverting power from the surplus States.

The cost of power supplied to Electric Furnaces is of a decisive importance in the overall cost of production. Next to scrap, it is the largest cost element in electric furnace steel production. Therefore, power is not only a prime mover but also a basic raw material. The power cost in Maharashtra for electro-metallurgical operations works out to more than 22 Paise per unit as compared to an average rate of 16.64 Paise in Punjab, 18.23 in Rajasthan, 18.30 in UP and 17.04 in MP. I, therefore, reiterate my earlier pleas that restructuring of the tariff for electro-metallurgical industries in the State of Maharashtra with a view to bringing down the unit cost, should not be deferred any longer.

#### EXPANSION

With the fruition of the merger of Bank of Baroda Ltd with the Company, I have now great pleasure in welcoming the shareholders of the erstwhile BOB Ltd into our family which will, thus, get enlarged to around 13,700 shareholders. You would not have failed to note in the Balance Sheet that during 1975, compared to the relevant data for the previous year, there have been sizeable increases in all assets. This is mainly on account of the receipt of about Rs 8.15 crores in the form of deposits and cash, consequent to the amalgamation of Bank of Baroda Ltd with your Company. This amount has been earmarked for the expansion programme already underway.

There has been satisfactory progress in the impementation of the project for expanding the capacity from 24,000 tonnes to 60,000 tonnes per annum of finished tool, alloy and special steels. Most of the major items of plant and equipment are expected to be received between the 4th quarter of 1976 and the 1st quarter of 1977. Excavations for buildings and plant and equipment foundations have practically been completed. Considerable headway has been made in fabricating the steel structures for the buildings. The 4th bay of the heat treatment and finishing

shop building is nearing completion.

Your Company is making a reappraisal of the capital cost of the expansion programme, having due regard to the steep appreciation in the values of foreign currencies in terms of the Rupee, escalation in cost of plant and equipment and the need for import of certain items of plant and equipment originally contemplated to be procured indigenously.

The expansion project is scheduled for completion by the end of 1977. Once commercial production at your Company's 60,000 tpy plant is established, it will be geared to meet the special requirements of some of the key and strategic sectors, such as, defence and defence-oriented industries, commercial vehicles and automobiles, tractors, aircraft, atomic energy, space technology and so forth.

#### OUTLOOK

The working results of the Company during 1975 have been dealt with in the Directors' Report. I am happy to inform you that your Company's order book position continues to be satisfactory mainly on account of the reputation your Company has built up as a dependable supplier of sophisticated alloy and special steels notched to the special requirements of individual consumers. Total sales realisation during the first 5 months of the current year were of the order of Rs 668.07 lakhs as against Rs 514.22 lakhs and Rs 538.73 lakhs during the corresponding periods of 1975 and 1974.

It is heartening to record here that your Company has been exploring several other business avenues with a view to broad-base its business activities. Firstly, as has been stated in the Annual Report, we are in the process of acquiring 14,500 Equity Shares in the Capital of Wheelabrator Alloy Castings Ltd (WAC). WAC's Plant is located very close to our Plant in Khopoli. We have offered technical assistance for putting the operation of WAC on a sound footing. The terms and conditions governing the offer of technical assistance would be of considerable benefit to your Company, as it would enable your Company to utilise optimally its own post-ingot stage facilities, particularly after Expansion. Secondly, the Merchandising Division of your Company has made a beginning in the exports of pharmaceutical intermediates.

Note: This does not purport to be the record of the proceedings of the Thirteenth Annual General Meeting of the Company.



## Industrial Capacity and Production — II

		1974			1975		
Name of Industry	Accounting Unit	No of Units	Installed Capacity	Annual Production	No of Units	Installed Capacity	Estimated (Annual Production)
PROCESSED FOOD INDUSTRIES							
Baby Food	Tonnes	10	26,578	11,174	10	29,578	22500
Milk Powder	—do—	13	25,784	12,416	18	37,389	18,000
Condensed Milk	—do—	6	13,800	5,783	6	13,800	4,000
Malted Milk Food	—do—	8	20,183	15,347	8	20,183	16,500
Cheese	—do—	1	500	443	1	500	450
Weaning and High Protein Food	—do—	6	8,951	2,926	6	8,951	5,400
Egg Powder	—do—	1	300	131	1	300	50
Drinking Chocolate	—do—	3	1,500	465	3	1,500	200
Chocolate	—do—	5	4,410	1,601	5	4,410	1,500
Cocoa Powder	—do—	3	642	57	3	642	50
Instant Coffee	—do—	2	2,139	1,669	2	2,139	1,350
Instant Tea	—do—	2	850	325	2	850	270
Ice Cream	000 litres	7	9,490	3,113	7	9,490	3,500
Flour Milling	Tonnes	155	4891,284	1746,251	158	4993,284	1474,593
Biscuits	—do—	30	104,448	63,303	31	17,448	51,110
Confectionery	—do—	22	35,928	16,764	22	35,928	7,120
Bread	—do—	16	81,260	80,550	16	81,260	84,957
Aerated Waters	Mn Bottles	34	1,731	631	34	1,731	730
Malt Extract	Tonnes	2	4,800	3,099	2	4,800	2,600
Meat Products	—do—	4	1,600	550	4	1,600	542
Pearl Barley	—do—	4	6,589	4,400	4	6,589	1,150
Corn Flakes	—do—	3	2,548	325	3	2,548	148
Oat Flakes	—do—	1	2,100	20	1	2,100	—
Fruit and Vegetable	—do—	31	97,869	26,500	31	97,869	24,434
Cottonseed Oil	—do—	80	11,69,600	52,520	86	12,99,600	73,000
			tonnes in terms of cottonseed	tonnes		tonnes in terms of cottonseed	tonnes
ELECTRICAL INDUSTRIES							
Electric Motors	Mn HP	35	6.115	3.11	35	6.3928	3.0
GLS Lamps	Mn Nos	14	166.2	128.9	14	157.57	150.0
Fluorescent Tubes	—do—	12	19.567	15.54	10	13.017	17.5
Miniature Lamps	—do—	8	62.30	40.30	9	64.800	40.00
Electrical Steel Stampings	Tonnes	34	90,000	45,000	35	93,000	50,000
Dry Batteries	Mn Nos	11	1,231	631.3	12	1291.0	500.0
Storage Batteries	Lakh Nos	7	18.23	13.19	8	20.63	14.00
Electric Fans	Mn Nos	16	2.991	2.33	16	2.991	2.40
Flashlight Cases	Lakh Nos	3	120.8	63.12	3		
Industrial Airconditioning, Refrigerator and Air Control Equipment	Rs Lakhs	25	2,720	1476.04	25	2,720	1143.00
Domestic Refrigerators	Nos	7	1,85,800	1,02,871	7	1,85,800	1,22,331
Room Airconditioners	—do—	7	44,780	26,702	7	44,780	10,278
Industrial Cooling Towers	Rs Lakhs	3	370	257.25	3	370	229.29
Water Coolers	Nos	7	9,986	6,245	7	9,986	6,476
Industrial Fans and Blowers	Rs Lakhs	15	NA	525.75 (Estd)	15	NA	440.70
ACSR/ARC Conductors	Tonnes	44	1,09,625	28,132	44	1,21,115	40,000
Winding Wires	—do—	32	37,290	17,261	34	39,560	16,000
PVC/VIR Cables	Mn core Metres	27	1,281.3	449	27	1,281.3	400
PVC/PILC Power Cables	KM	18	23,735	16,002	18	23,735	16,000
Underground Telephone Cables and Coaxial Cables	KM	3	12,900	4,055	3	12,900	7,000
Graphite Electrodes and Anode	Tonnes	2	10,850	7,645	2	10,850	8,206
Carbon Blocks (metallic grade)	—do—	1	80	57.5	1	80	35.00
Cinema Arc Carbon	Mn Pairs	4	18	8,236	4	18	10,294
Midget Electrodes	Mn Nos	2	475	291.2	2	475	296.00

Source: Ministry of Industry and Civil Supplies, Annual Report, 1975-76.



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Swetak CT

For Textiles  
Swetak MNA

For Polyamides  
Swetak NR

## CHEMICALS

Sulphuric Acid, Oleum 25%, Chlorosulphonic Acid, Oleum 60%, Hydrochloric Acid 30%, Caustic Soda Lye (Rayon Grade), Caustic Soda Flakes (Rayon Grade), Potassium Hydroxide Flakes, Liquid Chlorine, Phosgene Gas, Dicalcium Phosphate (Dentifrice Grade), Dicalcium Phosphate (I.P.), Phosphorous Oxychloride, Phosphorous Trichloride, Sodium Thiosulphate (Crystal and Powder) and Urethane.

## WEEDICIDES

2:4:D Sodium (Technical)  
2:4 Dichlorophenol.

## PHARMACEUTICALS

Quiniodochlor, Nikethamide I.P., Saccharine U.S.P., Saccharine Sodium I.P., Sulphadiazine I.P., Halazone N.F., Sulphathiazole B.P.C., Menadione I.P., Acetomenadione I.P. and Menadione Sodium Bisulphite I.P.

## PHARMACEUTICAL INTERMEDIATES

Methyl Dichloro Acetate, Toly-p-Sulphonyl Ethyl Carbamate, Para Chlorobenzene Sulphonamide, Orthotoluene Sulphonamide, Paratoluene Sulphonamide and Paratoluene Sulphonyl Chloride.

## DYE INTERMEDIATES

B.O.N. Acid, Chicago Acid, G. Salt, Gamma Acid, H. Acid, J. Acid, J. Acid Urea, Metanilic Acid, Peri Acid, Phenyl J. Acid, Phenyl Peri Acid, Rhoduline Acid, Schaeffers Acid, Sodium Naphthionate, Sulphanilic Acid and Tobias Acid.

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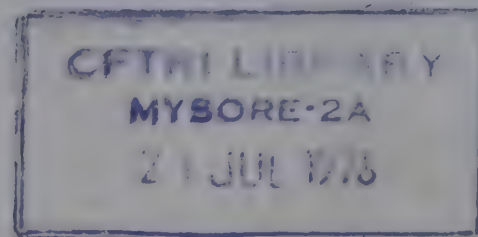
**WEEKLY**

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July 10, 1973



**LITTLE HEADWAY IN LAND REFORMS**

**MULTINATIONALS IN AFRICA**

**PATTERN OF RURAL ASSET-HOLDING**

**SURPLUS LABOUR IN AGRICULTURE**

**RURAL POOR: PRACTICAL TASKS**

**INTERMEDIATE REGIME'S PROGRESS**





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You, dear passenger.





# ECONOMIC AND POLITICAL

# WEEKLY

**Founder-Editor: Sachin Chaudhuri**

**Vol XI No 28**

**July 10, 1976**

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# The Danger

ARE the bad old days here again? The index of wholesale prices has been rising continuously since the week ended March 20. In the three months from March 20 to June 19, the index has shown a rise of 5 per cent. Over this period the index for food articles has risen by 6.5 per cent; that for industrial raw materials by 18.3 per cent, mainly because of a rise of 34.2 per cent in the index for raw cotton and of 26.2 per cent in that for groundnut; manufactures have shown a smaller rise of 1.2 per cent, though it must be remembered that in the case of manufactures no steep decline in prices had preceded the current rise; in fact, the index for manufactures for June 19 was 2 per cent higher than a year ago.

The recent rise in prices, and especially the sharp rise in those of cotton and groundnut, has demonstrated that despite the sweeping powers acquired by the government, its ability to decisively intervene in the working of the economic system is limited. The government has called meetings of representatives of wholesale and retail traders and the customary formalities of putting restrictions on the stocks of cotton that textile mills can hold and raising the margins on bank advances against these stocks have been initiated; but all to little avail. In fact, textile mills have used the occasion of complying with the requirement of stamping prices on cloth to raise prices quite sharply. Meanwhile, the controlled cloth scheme, the streamlining of which is one of the items of the 20-point programme, is in even worse doldrums than ever before.

All this strengthens the conclusion that the favourable monsoons and the resultant excellent harvests had more to do with the earlier price decline than any administrative actions or economic measures of the government. Similarly, whether or not the current trend of rising prices — which may be described as "seasonal" — will persist will again be largely decided by the current monsoon and the prospects for the next crop. This, to say the least, is scarcely a situation which the government can view with any degree of satisfaction.

Should the price rise persist, the government's response is likely to be a predictable one — and that is where the real danger lies. During the latest 12-month period, ended June 18, money supply expanded 11.6 per cent, which was considerably larger than the expansion of 6.5 per cent in the preceding 12 months. Given the extent of the Reserve Bank's, and the commercial banks', ability to selectively regulate credit to the commercial sector it would be too much to hope for restraints on commercial bank credit which would impinge on excessive inventory-holding. And given the need to live up to claims of impressive industrial growth and the slack demand conditions allegedly facing a number of industries, the pressures against any general tightening of the credit screw are bound to be formidable. In the circumstances, in trying to tackle a threatened revival of inflationary tendencies within the framework of conventional monetary and fiscal policies, the government is very likely to resort once again to cutting back investment.

It has been pointed out in these columns ("In Humbler Light", June 19) that, as it is, the increase in public sector development outlays budgeted for the current year is far more modest than suggested by the Planning Commission's misleading claim of a 34.1 per cent increase in the annual Plan outlay. The low levels of investment in the first three years of the Fifth Plan, including in the current year, have already compelled a scaling down of the Plan's targets in a number of vital sectors, including coal, power generation, steel, aluminium, cement and fertilisers. In effect this is the price that has had to be paid for controlling the last bout of inflation. Another dose of the same medicine, after so short an interval, will surely make nonsense of all pretences to growth and employment generation, not to mention expansion of social services (expenditure on which is invariably the first casualty in any general cut-back in developmental outlays) and improvement in the economic condition of the poor. It is a measure of the decline of planning that the country should face such a prospect at a time when it has larger stocks of foodgrains than it can efficiently store, an embarrassing abundance of steel, coal and many other intermediate products, excess capacity in the capital goods industries, and a more comfortable foreign exchange reserves position than it has had for almost two decades.



## The North-East

### Mopping Up

THE people of the 'outlying' regions in the north-eastern part of the country are no strangers to what might be called mopping-up operations. But in the last few weeks, an altogether different kind of clearing operation seems to be taking place in that area.

It all started with the long-expected announcement that the Naga National Council had agreed on a political settlement with the government of India and that the Federal Government and the Federal Army had agreed to lay down arms. Though till now it is not clear how the insurgents and politicians at present away from Nagaland are going to react to this 'settlement', militarily speaking, the operation has had all the appearance of being successfully concluded.

Soon after the news of the military settlement came yet another even less unexpected news. The Naga Nationalist Organisation, out of office after leading a nine-day wonder ministry, had opted to join the Congress. In fact, the NNO dissolved itself and merged into the Congress party, and at once, by implication, into those wonderfully rejuvenating waters called the mainstream of national life. By all accounts, the United Democratic Front of Nagaland was equally anxious to join the mainstream, and individual members did precisely that; but the Congress would have been probably embarrassed had it showed itself quite so avid in gathering companions into its fold. And so the UDF continues, at least for the present, to maintain its separate identity.

This apparently successful conclusion of military and political operations in Nagaland has been followed by similar developments in Mizoram. Unlike in Nagaland where the Congress party did not formally exist till the NNO transmogrified itself into the Congress, in Mizoram the Congress party has been in existence and was, till the recent military consolidation, in uneasy alliance with the Mizo Union and other groups. But here again a process of political tidying up has started. As a beginning, the Mizoram Pradesh Congress Committee was dissolved in February last, and an *ad hoc* body under an MLA reportedly loyal to Chief Minister Chhunga was formed. Militarily too, the developments have taken a by-now predictable course. Good Christian counsel from missionary politicians,

combined with presumably effective military pressure, have evidently led the leaders of the Mizo National Front too to make the journey to Delhi and sue for peace.

Similar trends are discernible in Manipur and Meghalaya. In Manipur, the Manipur Hill Union — a party broadly representative of the Naga People residing in Manipur's hill regions, which at one time had, in collaboration with the Manipur Peoples' party, broken the Congress dominance in the state — has now "dissolved itself" and merged with the Congress. There have been reports too that the All-Party Hill Leaders Conference in Meghalaya, long subjected to sniping not merely from the formally constituted, but politically insignificant state unit of the Congress party, but from elements within itself, is due to meet later this month in a general session at Tura and, according to the "informed sources" of one newspaper reporter, "one of the major items, if not the only major item of discussion at that meeting will be whether the APHLC should merge with the Congress". It is hardly surprising, in view of these developments, that last week, at another end of the country, one of the general secretaries of the Congress party was advising the two major parties in Goa to disband themselves.

### Italy

#### The Church Militant

DESPITE all its efforts at projecting a highly respectable image of itself, the Communist Party of Italy (PCI) has not made the kind of gains that its friends and enemies had hoped and feared it would make, in the recently concluded Italian general elections. The impression created in the months before the elections that the Party would emerge as the largest party in the chamber of Deputies has been belied; Enrico Berlinguer is not yet the prime minister of Italy.

Nobody can accuse the PCI of not trying hard to win; and in the process, the kind of concessions that the Party made to 'public opinion' not merely in Italy but in Western Europe in general made it, in the eyes of its critics, not much different from the run-of-the-mill left wing of any social democratic party. But such criticism, besides being superficial, fails to take into account the evidently serious analysis the PCI had made of the relationships between the classes in Italy at this juncture; the

political line of the Party could not have been sustained in the face of "international" reservations about it, if it had not been evolved from below, with wide, democratic participation in the evolution of the line. Over the years, through regular participation in elections, and by combining such participation with extra-parliamentary struggles, the PCI had built itself up as a 'natural' party of the government. In the process, the party has had no doubt to make some concessions, not all of them merely verbal, or superficially ideological; but perhaps, there *was* a different road to socialism available to the Communist parties of Western Europe; a Communist party *could* acquire power through participation in an electoral process evolved and perfected by its class enemies, and, in the gentlemanly idiom of the ruling classes, play the parliamentary game according to the rules.

But despite the PCI's faithful and entirely credible promise to play the game according to the rules, and despite its actually playing it accordingly, the prize it sought is yet to be attained by the Party. Its class enemies have been extremely active in mobilising their supporters, and in this confrontation, the PCI has come off second best. Whether the election results have vindicated the political and ideological line of the PCI (and of other non-ruling Communist parties in bourgeois democracies which, with varying competence and élan have been following similar policies), or whether the election results will lead to some sort of rethinking, one cannot yet say. But one should certainly take note of the kind of mobilisation that took place to deny the PCI any role in Italian government.

The role of the United States, as exemplified by the crude threats of its secretary of state, was the least surprising and the most obvious; but the Roman Catholic Church, being much longer in this business of opposing anything the least smacking of modernity and progress, was much more subtle. Towards the closing stages of the campaign, even the Roman Catholic Church seems to have panicked a bit, and came out more openly against the Communists, threatening Communist supporters with excommunication and worse. There has been a tendency, of late, among sections of the radical intelligentsia in Catholic countries, to romanticise the Church and see "progressive" elements within it. In view of this, the firm reiteration by the Church of its uncompromising anti-communism should be



welcomed in that it helps clear some (possibly deliberately inspired) confusions. What has been significant in the Italian elections was not the politically active role the Church played — the Church has always been actively involved in secular affairs — but the openness with which it played this role.

## News Pool

### New Mirror

WHAT is most striking, and significant, about the proposal to set up a press agencies pool of the non-aligned countries is its government sponsorship. The idea was first mooted at the conference of foreign ministers of these countries in Lima last year. It was then discussed at a meeting of representatives of governments and news agencies in Tunis in March this year. And now the recommendations of the six-day conference which began in New Delhi this Thursday are to be remitted for approval to next month's meeting in Colombo of the heads of governments of non-aligned countries. The New Delhi conference itself has been designated a 'ministerial' one and, appropriately, the Indian delegation to it is being led by the minister for information, with the special envoy to the Prime Minister as alternate leader and the deputy minister for information as the deputy leader.

In recent months the Prime Minister, as well as other government spokesmen, have repeatedly referred to the distorted reporting of developments in this country by the Western Press and news agencies. Governments of many other non-aligned countries no doubt feel the same way about reporting of events in their respective countries. This commonly-shared feeling is the basis of the apparently overwhelming support for the news pool proposal.

It is, of course, a fact that the reporting of the Western Press and news agencies reflects the prejudices of those who control them. For one thing, the coverage of events in the third world is still relatively scanty; for another, developments which are seen as being in the direction of more favourable treatment of foreign capital, more liberal import and export policies, etc, are approvingly dealt with while those in the opposite direction are derided. Governments of many non-aligned countries benefit from this bias of the Western news media in that pursuit of open door policies towards foreign capital and generally pro-free enterprise economic

measures commend these governments in the eyes of these media and to an extent serve to cover up a multitude of other sins such as suppression of political opposition, aggravation of internal economic disparities and worsening of the condition of the poorer sections of the population.

The objective of the news agencies pool is that reports by the national news agencies, most of which are under varying degrees of government control, on the developments pertaining to a country will be disseminated in the other countries forming part of the pool. While such an arrangement will have much to commend itself from the point of view of the governments of the non-aligned countries, difficulties may arise in specific situations. For instance, the Libyan and Sudanese views of recent events in Sudan or the Syrian and Iraqi versions of the developments in Lebanon may not exactly coincide. But even in such cases, a non-aligned third country will presumably demonstrate its impartiality by giving equal weightage in its own national news service to the two governments' versions!

## Iran

### All Is Forgiven

THE Iranian government is reported to have announced a "general amnesty for any surviving members of terrorist organisations not already on the wanted lists". The news report in question adds: "The Military Judiciary Department announcement, published by the newspapers, said the government was acting in the belief that police raids of the past week had wiped out the hard core of terrorist leadership in Iran and that any of their surviving supporters should be given an opportunity to renounce any further support for an activity in the cause." Every kind of opposition to the present regime is presumably covered by the terms "terrorist" and "terrorist organisations".

It is now more than a year since the Shah announced the dissolution of all political parties and their merger into the Iran Resurgency Party, the only party allowed in the country. The communist party of Iran, of course, has been long outlawed. Little is known of the continuing opposition to the regime, except that it seems to comprise Marxist and radical religious elements. Operating under extremely adverse conditions, the communists have had to devise unique tactics (including a possible coalition with orthodox religious groups

opposed to the Shah) to survive and fight. Since the beginning of the year, there have been at least 11 cases of guerilla attacks, and 51 guerillas have been killed or captured.

The economic situation in the country must be another source of growing uneasiness for the Iranian regime. The sudden accretion of wealth due to the oil boom and the progressive increase in crude oil prices, which is reported to have led to a record 34 per cent rise in the country's GNP during the year ending March 1974, has now been succeeded by unexpected economic difficulties, resulting in substantial budgetary deficits in the current year. But the problem is not merely one of balancing the budget; it is that of the whole development strategy, the deliberate choice of lopsided "growth", leading to the prosperity of the big cities, huge military expenditures (estimated at \$ 3.6 billion in 1973, and now probably amounting to an even larger sum), wide-ranging investments in foreign concerns, etc. And since the basic production relations in industry and agriculture have remained the same, the 'wealth' generated by all the economic activity has never reached the bottom layers of Iranian society.

## Clippings

Prices of all essential commodities have mysteriously shot up in Bombay markets during the last ten days and neither the wholesalers nor the retailers appear to be in a position to explain why sugar, wheat, groundnut oil and other edible oils should suddenly become costlier.

*Free Press Journal, July 7*

The wholesale traders of Bombay have voluntarily agreed to supply groundnut oil without any profit margin during the current season.... Although the traders have extended their co-operation to the state government in checking the price rise in groundnut oil, the city has witnessed a rise of Rs 450 to Rs 5,600 a tonne during the last three days alone.

*The Economic Times, July 2*

Cotton textile mills are planning to push up cloth prices further taking advantage of the cloth pricestamping scheme which is to come into force from July 15.

*Business Standard, July 4*

In a desperate bid to counteract the latest inflationary trends, the Union government will release another Rs 35 crores for the import of cotton. The government has also decided to remove 40 per cent import duty on cotton.

*Business Standard, July 5*

The Union government which is concerned about the critical cotton



supply position is sending an official team to various cotton producing countries to arrange for early imports of the commodity.

*Financial Express*, July 7

Imports of about 55,000 bales of cotton from the USSR are considered a certainty despite the fact that the Russian cotton is costlier by Rs 1,000 to 1,200 a candy than the Indian variety.

*The Economic Times*, July 2

Mr S N Chakravartee, Jute Commissioner, said here [Calcutta] today that appropriate action would be taken by the government to prevent speculation in jute goods after receipt of the final report of the Bose-Mullick Committee.

*Financial Express*, July 6

The question of resumption of hedge trading in hessian is under the active consideration of the government, according to Mr R B Vaghaiwalla, chairman, Forward Markets Commission.

*The Economic Times*, July 6

The Indian National Trade Union Congress in West Bengal has complained to the Union Commerce Minister that his measure to cut the jute mills' production by 18 per cent is being overacted. It has alleged that the cut ranges between 20 per cent and 40 per cent in different mills, causing loss of work for more than 40,000 people.

*The Statesman*, July 3

Textile mills are increasingly trying to evade excise duties, according to the Central excise collectorate in Bombay.

*Business Standard*, July 2

The restrictions on declaration of dividends and their payment to shareholders, imposed in 1974, will cease to operate from Tuesday, according to a press note issued by the Finance Ministry this evening.

*Business Standard*, July 4

With the withdrawal of restrictions on declaration and payment of dividends, share market circles here are hopeful that the government would relax further the conditions governing the issue of bonus shares in the interest of reviving the capital market.

*The Economic Times*, July 5

Share markets have greeted the announcement of the withdrawal of dividend curbs by a substantial mark-up in prices of pivotal shares in unofficial deals on Saturday evening.

*The Economic Times*, July 4

The irrigation rates of state tube-wells have been revised.... A government spokesman said the new tariff would amount to "reduction in irrigation rates", the fall being approximately 25 per cent depending upon crops.

*Hindustan Times*, July 3

The Tamil Nadu Electricity Board has decided to give special concessions to the agricultural consumers...

*Financial Express*, July 7

A large number of life insurance policies are being surrendered in the Calcutta Division of the LIC beginning

from June this year... 50 per cent of the policies surrendered were motivated by economic hardship of poor and middle strata of society.

*Business Standard*, June 6

The introduction of casinos would not adversely affect the economically weaker sections of the society as the government would protect their interest while framing rules, assured minister of state for home Ramesh Valvi while replying to the debate on the first reading of the Bill to control, regulate and impose tax on betting casinos, in the Maharashtra Legislative Assembly on Friday.

*Indian Express*, July 3

The All India Congress Committee would now pay more attention to the Goa Pradesh Congress Committee in order to strengthen it, Mr V B Raju, AICC general secretary said at a press conference here [Panaji] today.... Referring to the two major regional political parties in Goa, Mr Raju said there was no justification for these parties to continue any longer.

*Indian Express*, July 6

## PERSPECTIVES

### Intermediate Regime, Act II, Scene 1

Ranjit Sau

#### I

THE curtain rose after the second world war. Scene: the continents of Asia and Africa. Colonial outposts fell one after another. With little or no armed struggle, independence came to a number of these countries. Mainly the middle and petty bourgeoisie had led the non-violent movement against the imperialists; rich peasantry joined them a little later. They also enjoyed numerical strength. So, naturally, on the morrow of political emancipation, the reins of government fell in to their hands.

It is not forgotten that during the struggle for independence the landed aristocracy had sided with the colonial order; and that the big business had collaborated with foreign capital to stifle the growth of the middle bourgeoisie. The rich peasantry also had suffered a lot, as the foreign planters and export houses dominated the market. In the first flush of enthusiasm the new regime, after independence, sets out to erode the power base of the landlords and to reduce the grip of foreign capital. It receives popular support in such ventures of land reforms and industrialisation. In all this the countries

The Opposition Manipur Hill Union has dissolved itself and "all its members" have joined the Congress, reports Samachar.

*The Statesman*, July 6

A 30-strong Indian naval contingent drawn from the visiting Indian naval ships took part in the flag-raising ceremony when Seychelles attained freedom. The three ships of the Indian navy took part in the nationwide celebrations.... Six other warships, two each of the Royal Iranian and French navies and one each of the US and Australian navies have also arrived there.

*Indian Express*, July 2

What "methods" do the Central government servants use for family planning? This is one of the questions which the Health Ministry has posed to them. Employees have also been asked to send information about their plans for sterilisation. These questions form part of a cyclostyled proforma which the Commissioner for Family Planning has sent to the government employees.

*Indian Express*, July 5

of the socialist bloc find the ingredients of an anti-feudal, anti-imperialism struggle; so they extend their material support to the regime. The middle and petty bourgeoisie and the rich peasantry had come to power in earlier phases of history as well; and always they had subserved the interests of big business, feudal remnants and imperialism. But now there is a difference. At the current confluence of historical specificities they can, and do, afford a certain degree of autonomy.

The task of primitive accumulation remains yet to be completed; and the bourgeoisie is not strong enough to accomplish it. So the state has to intervene in the economic sphere in a big way. It suits the ruling classes of middle and petty bourgeoisie and rich peasantry also very well. Their hold over the economic base is far short of their power over the political superstructure. This disjunction between political and economic prowess can now be resolved through strengthening state capitalism, the levers of which are controlled by them. Thus the zeal for a strong and growing public sector is combined with the slogans for 'radical' land reform and for self-re



liant industrialisation; and the net result is new brands of indigenous socialism, called African socialism, Nasserite socialism, and so on.

The regime performs a tight-rope walk. Externally, like the proverbial clever calf it sucks two cows: both the capitalist and socialist blocs give it financial aid. Internally, it faces hostilities from 'above' as well as from 'below'. From above, its enemies are the big bourgeoisie, allied as it is with foreign capital and feudal remnants; from below, the antagonists are poor peasants and the proletariat. Those on the upper deck do not dare upset the equilibrium too much, lest it should set in motion a far more radical movement; and those at the bottom are too unorganised and weak to mount any meaningful offensive. So the regime relishes an unprecedented extent of stability, with its socialist slogans, tinged with anti-feudal, anti-monopoly, anti-imperialism and, simultaneously, anti-proletariat stance.

This is called an intermediate regime — intermediate, because the ruling classes come from neither the top nor the bottom echelons of the social hierarchy. Such a regime is not only feasible and stable in today's milieu, it is also efficient. Nowadays technological advancements are such that their fruits are divisible into smaller packets. All the bounties of modern technology can be brought to the doors of a small one-acre farm as easily as they can be adopted in bigger plots; witness the performance of small farmers with the Green Revolution technology. Such is the case in factories also. After all, the econometricians have demonstrated that the production function, be it in agriculture or industry, is homogeneous of degree one; productivity is neutral to scale.

In the year 1964, at the height of the post-war period of decolonisation, Michal Kalecki, the celebrated Polish economist, first conceptualised this intermediate regime.<sup>1</sup> His own attitude to it was definitely mixed with considerable reservations. As he visualised it, "one can easily understand the repressions against the communists" in the intermediate regime, where indeed a powerful communist party is an 'anomaly'. Kalecki did not live to see the subsequent unfolding of the intermediate regime. What he had seen was the first act. Here is a report of Act II, Scene 1, of the drama of intermediate regime.

## II

The sixties and early seventies mark a turning point. The scope for further expansion of agricultural area has been exhausted. The limit of import-substituting industrialisation of mainly consumer durables and a few of capital goods has been approached. The first flush of enthusiasm is wearing thin. Foreign capital which was kept at bay for a while in the beginning has come back with a vengeance. The friendly credit from socialist countries has helped to increase the friendship, but very little anything else. The 'aid' received from capitalist countries add up to a total that is nearly one-half of the national income, if not more. Much of the export earnings now goes out for debt servicing; the country has to borrow to repay the annual instalment of past loans; it is deep in the quicksands. The press flashes big headlines when even a small country like Sweden, for instance, announces a fresh loan; the government takes it as a vindication of its correct foreign policy when Belgium grants debt relief for a year; it is hailed as a major breakthrough when an obscure Emirate in the Gulf gives it a line of credit. So the show goes on. But soon the plot thickens.

The economic power of the ruling classes is not commensurate with their political muscle. The growing public sector cannot grow fast enough to absorb the swelling ranks of educated job-seekers. The ever-multiplying colleges and institutions of higher learning have meanwhile churned out millions of degree and diploma holders — the children of the families of the ruling classes. In the name of facilitating industrialisation, the public sector has been subsidised, but in effect only to pass on the benefits to the big bourgeoisie. Caught in the pincer of rising wage bill and falling revenue, the public sector knows not where to go. But jobs have to be provided. Remember the Ceylon uprising of educated youths?

Weather also takes its periodic toll. The economy is mainly, if not solely, agricultural; and almost all the cropped area is at the mercy of the rain gods. Throughout the centuries the feudal landlords have only exploited the peasants, and have had very little urge to invest in irrigation, flood control, drainage and land conservation. The land reforms under the intermediate regime have certainly made a dent on the ar-

chaic arrangements; but the power base of the age-old rural oligarchy has been left largely untouched. With the spiralling wage bills in public sector industries and government administration, the demand for foodgrains outside the agricultural sector rises; and with inelastic supply, their prices inevitably begin to, first, creep up and then gallop. As foodgrains constitute the lion's share of a consumer's budget, and also the first charge on it, every step in the upward journey of foodgrains prices marks a corresponding erosion of the market for industrial goods. The big bourgeoisie soon comes to grief. The industrial structure which has been laid out so meticulously over the years with government patronage of all conceivable forms now finds its home market shrinking.

From a distance you can hear the muffled strains of a chorus sung by the labour aristocracy, the petty bourgeoisie and the rich peasantry. Gradually the notes become distinct; and then the message comes out loud and clear. Demands — wages must be raised in step with the rising food prices; nephews and nieces, sons and daughters, brothers and sisters, of the employees must be absorbed in the company's payroll; the government support price for crops must be enhanced; and so on. The chorus soon breaks into a medley of angry shrieks, shouts and rumbling threats.

The big bourgeoisie has been watching the situation with heightened anxiety. The reins of the government can no longer be left in the hands of the representatives of the petty bourgeoisie and the rich peasantry. The equilibrium has been disrupted once and for all. These social strata can no more function as a buffer against the impoverished masses of poor peasants and the proletariat. The historic victories of Vietnam have inspired even the remotest villages across the continents. Besides, the soaring expectations of the petty bourgeoisie cannot be accommodated within the frail economic structure. The local Fords and Rockefellers are momentarily at a loss as to what to do. For a few brief seconds they even work at cross purposes. But that is only due to the temporary shock. The problem at hand is big enough to require their united might and singular determination. After all, it is a question of life and death for big capital!

You do not expect industry to stand idle. Should the home market recede



with rising foodgrains prices, decisive blows must be hurled in the right directions. After all, it is a question of life and death! Launch the campaign on three fronts. First, find out other underdeveloped countries which are at the lower rung in the ladder of industrial sophistication. Export at any cost, products, technology and personnel, to those countries. Second, enough is enough; something must be done to ensure a steady flow of foodgrains and agricultural raw materials for industry. Now, the chips are down; the fetters on agricultural growth must be set aside, no matter who is hurt in the process. Well, if a friend receives bruises, he may be duly compensated in other ways. Third, in order to revive the economy from the morass of stagnation, let foreign capital be encouraged to move in, with all the assurances and guarantees being given.

These are all but surface phenomena. The situation calls for a far more deep-going solution, a fundamental realignment of the main characters of the high drama. So long, state capitalism has directly maintained, in general administration and in other enterprises, a legion of well-paid employees whose number far exceeds that of the workers in factories of private capitalists, in the naive hope that they may be pampered into loyalty to the prevailing order. Concessions given to the petty bourgeoisie, instead of bringing it into line, have only whetted its appetite even more. The buffer has thus turned into a Frankenstein's monster; the intermediate stratum has bloated to the extent of impinging upon the big bourgeoisie. Now, it is to be put in its place again.

Indirect compensation has to be given to those landlords whose vested interests are affected in the process of clearing the roadblocks to agrarian growth. And the high costs of exports abroad must be shifted on to somebody; the wage bill must be trimmed accordingly.

For all this, the balance of power must be altered drastically. Blessed as it is by the World Bank, the big bourgeoisie now sheds crocodile tears for the wretched people below the 'poverty line'. Crumbs are thrown at them which would cover a larger constituency than previously when those were meant for the relatively affluent section of the petty bourgeoisie. A channel of direct communication is thus established between the two polar extremes of the class spectrum, bypassing the middle segment. Yet this is not the beginning of the end of intermediate regime; it is only a short interlude before the drama

reaches its climax. Curtain falls on Act II, Scene 1.

It is not known whether Kalecki would have characterised the situation in 'many underdeveloped countries' of Asia and Africa as of the last decade, in these terms. But it is almost certain that by now he would have added a second footnote to his 1964 article as a sequel to the first one which was written in

the wake of the events of September 30, 1965 in Indonesia.

## Notes

- 1 M Kalecki, "Social and Economic Aspects of 'Intermediate Regimes'", first published in Poland at the end of 1964, then in the periodical *Co-existence*, Vol IV, in 1967. Reprinted in his "Selected Essays on the Economic Growth of the Socialist and the Mixed Economy", Cambridge University Press, 1972.

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# Higher Profit and Idle Capacity

Hansavivek

TRAVANCORE ELECTRO-CHEMICAL commissioned its Plant No 2 towards the end of May 1975. The plant has been working satisfactorily, but production could not be increased because of insufficient power. KSEB has now laid additional 66 KV lines to increase power supply to the company and the management is awaiting sanction for additional power. During 1975, the company's total production of calcium carbide was lower, at 13,243 tonnes, than the previous year's 13,422 tonnes. Its installed capacity is 25,000 tonnes. Plant No 1 had to be closed for a couple of months for necessary modifications in order to be able to commission Plant No 2. Moreover, there was a breakdown in 66/11 KV substation of the company. Sales were barely 3 per cent lower than last year's, but gross profit plunged down by 30 per cent. Margins were slashed because of the rise in the cost of raw

materials — especially carbonaceous materials of good quality which were even difficult to obtain — and the company could not produce 'A' grade calcium carbide. Besides, the electricity tariff has been raised by 200 per cent. With the tax liability substantially reduced, net profit turned out to be a little higher than last year's. Dividend was maintained at 15 per cent. The company is negotiating terms with a number of prospective collaborators for manufacture of acetylene black. One of the notes appended to the accounts disclosed that an amount of Rs 7,50,000 was advanced to a firm in which a relative of two of the company's directors is a partner, for purchase of plant and machinery, pending assignment of the same in favour of the company. The company consumed imported goods equivalent to Rs 8,22,133, whereas it did not earn any foreign exchange.

JAGATJIT INDUSTRIES has received a 'letter of intent' for manufacture of a whole range of milk products at Proddatur, in the 'backward' district of Cuddapah in AP. The project will be set up in the joint-sector in association with the state government. Arrangements are being made to float a new public company for this purpose. During 1975, Jagatjit's sales increased by about 21 per cent, but gross profit was up by less than 11 per cent. Net profit turned out to be higher than last year's, and the unchanged dividend of 12 per cent was covered 5.4 times by earnings — as against 4.3 times previously. The company has received government consent for issue of bonus shares on a one-for-one basis. There has been an over-run of Rs 59 lakhs in the project cost of Universal Glass, promoted by Jagatjit for manufacture of glass bottles. Jagatjit has already invested Rs 36 lakhs in equity shares of UG, and proposes to invest another Rs 10 lakhs in 11 per cent preference shares. Preference shares of Rs 50 lakhs will be taken up by financial institutions.

## The Week's Companies

(Rs in Lakhs)

	Travancore Electro		Jagatjit Industry		Beco Eng		Finlay Mills	
	Latest Year 31-12-75	Last Year 31-12-74	Latest Year 31-12-75	Last Year 31-12-74	Latest Year 31-12-75	Last Year 31-12-74	Latest Year 31-12-75	Last Year 31-12-74
Paid-up capital	80	79	96	96	43	43	120	80
Reserves	169	137	348	238	42	28	159	187
Borrowings	180	127	316	250	156	168	404	383
of which Term borrowings	48	37	15	6	43	47	64	76
Gross fixed assets	222	134	389	342	187	186	614	586
Net fixed assets	169	120	303	254	127	133	218	208
Investments	7	7	80	61	—	—	1	1
Current liabilities	64	34	291	261	45	43	221	150
Current assets	317	251	690	545	159	148	690	590
Stocks	161	112	282	307	112	89	484	429
Book debts	152	100	300	172	44	45	202	155
Net sales	309	319	1147	949	268	285	837	771
Other income	4	2	9	15	11	10	218	162
Raw material costs	34	71	687	554	170	214	308	305
Wages	33	29	67	54	38	31	326	301
Interest	21	13	47	43	20	18	55	43
Gross profit (+)/loss(—)	56	79	136	123	22	15	55	65
Depreciation provision	14	8	17	14	7	7	24	23
Tax provision	15	46	68	62	—	—	11	11
Net profit (+)/loss(—)	27	25	51	47	15	8	20	31
Development rebate provision	10	—	—	6	—	3	1	10
Transfer to reserves	6	15	40	30	13	—	6	11
Dividend								
Amount	P 1 E 10	1 9	P 2 E 9	2 9	P — E 2	— —	P — E 13	— 10
Rate (per cent)	P 9.5 E 15	9.5 15	P 9.5 E 12	9.5 12	P 6.6 E 6	— —	P — E 11	— 12
Cover (times)	1.60	2.66	5.44	4.33	7.50	—	1.46	2.10
Ratios (per cent)								
Gross profit/sales	18.12	24.76	11.85	12.96	8.29	5.26	6.33	8.43
Net profit/capital employed	6.29	7.29	6.71	8.05	6.22	3.34	2.92	4.77
Inventories/sales	52.10	35.11	24.59	32.39	41.79	31.23	57.85	55.64
Wages/sales	10.67	9.09	5.84	5.69	14.18	10.88	38.75	39.04



**BECO ENGINEERING** has secured an industrial licence for diversification of machine-tool production at the Ballabgarh plant. It has been authorised now to manufacture pipe-threading machines, flame hardening equipment, facing lathes, special purpose lathes, and double-column planning machines. Meanwhile, the order position for machine-tools is satisfactory. The company has recently received orders from UK for export of machine tools worth Rs 65 lakhs. The market for rolled products, which was somewhat depressed, is also now showing signs of revival. The company has taken steps to diversify the range of products of the rolling mill too. During 1975, Beco's production of rolled products, including bright bars, was 8,335 tonnes as against 9,936 tonnes during the previous year. Power restrictions in the earlier part of the year and recessionary trend in the economy were responsible for lower production. Production of castings and forgings was also lower at 875 tonnes, against 964 tonnes previously. Although sales were lower, the company earned a higher gross profit, and was able to resume payment of equity dividend with a recommendation of 6 per cent.

**FINLAY MILLS** experienced diminu-

tion of profit margins despite higher sales, because the cost of production rose in all directions. Dividend was lowered by a point to 11 per cent on the capital increased by a one-for-two bonus issue. Of this, 5.55 per cent is the 'immediate' payment. The provision for gratuity made in the accounts for 1973, amounting to Rs 13 lakhs, has been written back. After taxation adjustments thereon this left disposable surplus slightly higher than the previous year's. The company fulfilled its controlled cloth obligation by making arrangements with other mills to manufacture part of its quota. Efforts to increase exports did not make much headway, but the management plans to achieve much higher export targets during the current year. The company continued to pursue its programme of modernisation and rehabilitation and is placing further orders for machinery. The chairman, Ratansi Mulji, finds it difficult to make a clear-cut forecast of the prospects of the textile industry and the company for the current year. He says that much depends on government policies in the matter of controlled cloth, the speed at which modernisation can be effected, reduction in prices of cotton and other cost inputs, adequate supplies of power and water, and availability of needed finance.

have gone mostly to the executives and engineers and to a small section of skilled workers. Another large employer, Hindustan Steelworks Construction, the public sector contractors for the Bokaro project, has 18,000 employees of whom 10,000 are officially claimed to have been given residential facilities. Here again, trade union sources allege that the number of "housed" employees is not more than 5,000. This counter-claim is described by the HSCL management as "false and exaggerated" on the ground that "about 5,000 workers have been financed for building temporary huts for themselves". Besides, the HSCL claims to have constructed 2,721 houses "where 3,218 employees are living". These employees are the engineers.

Apart from the BSL and the HSCL, there are several private construction companies and ancillaries having 45,000 to 50,000 employees, including unskilled workers. According to trade union sources, hardly 5,000 of these employees have got houses. The rest are living in jhuggis. Among all the working people who have not yet got houses, the condition of the private company workers is the most pitiable. Till a few years ago, they had been living along Chas-Bokaro road in jhuggis built with used bags, flattened canisters, abandoned wooden planks, bamboo splits and rags. More recently these hovels were visited by the bulldozers. The objective was partly to beautify the area and partly to prevent epidemics. Today nobody knows where these slum-dwellers have gone. The remnants of the ruthless trampling can still be found at several places in and around the city.

Not that the workers of BSL and the HSCL are in any way better off as far as housing is concerned. Far south of Bokaro city are located twin slum colonies housing nearly 10,000 workers of the two concerns. There the workers have been allotted land but nothing else. In the Jhonpdi Colony and Azad Busti live skilled and unskilled workers, with their families, in small stuffy rooms like veritable outcasts not allowed to live with the higher people of the main city. The colonies identify themselves: stagnant marsh, open-air latrines, overflowing drains, swarms of flies and regular brawls for water. In Azad Busti, where six to eight thousand labourers have erected their huts, there is only a straight-line water pipe jointed at intervals by per-

## FROM OUR CORRESPONDENTS

### BIHAR

## How Bokaro's Builders Live

Arun Sinha

HAVING grown stupendously in size and in population in a very short span, Bokaro city is today facing a severe housing problem. In the last few years there has been uncontrolled immigration into Bokaro, upsetting the grandiose city development plan. Bokaro city was built in the early years of erection of the Bokaro steel plant, according to a 'town plan'. Evidence of this can be found in the precision of the 'sectors' and the houses built at that time. The early-comers to Bokaro were thus very fortunate; barring the lower section of workers, they all got residential facilities. The executives got bungalows, their juniors got good houses while the engineers and technicians were given two-room flats. The bungalows have re-

mained safe, but the flats and other dwelling units have been split up by order, to be shared. But the pressure of population is still mounting, and there is a queue for flat-sharing. Engineers are living with technicians and the latter are sharing accommodation with workers. "It's almost impossible to get a flat at Bokaro now", comments a personnel officer; "here, for instance, are six families sharing one house that may not have more than four rooms or separate toilets."

Bokaro Steel today has nearly 32,000 employees on its payroll. Of them, 14,000 have been given accommodation. There are no data to show how many of them are workers. Trade union sources claim that the houses



pendicular small pipes with taps. The water is supplied for limited periods — from 5 am to 8 am, 12 noon to 2 pm and 5.30 pm to 8 pm. The most troublesome time at these taps is in the morning when pitchers and buckets line up in very large numbers. A dweller of Azad Busti, no matter how far from the tap he is living, wakes up sharp and starts for water early in the morning. The people in Jhonpdi Colony suffer the same fate; they have 15 taps and five handpumps, all of which go dry or turn miserly in summer. Even on normal days the pressure of water in the taps is very low, while the handpumps require continuous operation.

The water crisis in the two workers slums has made privacy impracticable. Men and women bathe at one tap. What is the alternative? Worse, there are the communal latrines. At the Jhonpdi Colony a public lavatory comprises a combination of abandoned steel trusses built by a factory nearby. The truss being only a skeleton-type structure, the place reveals more than it hides.

There is no dispensary in either of the two colonies for immediate medical help. A doctor sits, at Jhonpdi Colony, in an old building that functions also as a primary school. The usual time to catch the doctor at the place is between 5.30 and 6.30 pm. "But it all depends on the doctor's mood", says Sundar Singh. At the doctor's place, there are no drugs to be found. For a serious case, you have to walk or cycle a couple of miles to the Steel Gate to requisition the ambulance on phone. The primary school in the old building is completely useless; there is one teacher and the workers' children number more than 10,000. Bokaro Steel or HSCL has not built any schools. The children of workers have been thus deprived of the chance to go to school. This means that when they grow up these children will be no different from their fathers — illiterate and poor.

Food is a serious problem. Most workers in the two colonies complain that the fair price shops have closed down. "We haven't got a single grain from the ration shop in the last four months", says Karan Yadav of HSC. The public distribution system has a much greater role to play in a high-price zone like Bokaro than, say, in Patna where prices can be easily controlled. The workers used to have one

market in each of the two colonies, but now the one in Jhonpdi Colony has been bulldozed. The demolition of the Duggal Market in the colony this June under the slum clearance plan has made living conditions worse for the workers. They now have to trek five kilometres to reach the nearest market. Transport is scarce in the area and roads are too bumpy to use a bicycle. "We had it easy until Duggal Market was rolled up", says Chunni Yadav. "Today we go to Dhundi-bagh or Azad Market and fetch the food for a month either on our back or on a hand-pulled cart at a prohibitive hire-charge." Two days after Duggal Market was demolished, the bulldozers moved into gwala khatal, where the milkmen lived in rickety jhuggis. The khatal was of great help to the workers, who have still not located a suitable place from where to bring milk for their children. Meanwhile, the gwala khatal in the VIP sectors of the main city continue to exist undisturbed.

Drowned in such miseries, the work-

ers brood about the next day's food in their houses, which are like animal cages in small zoos. The BSL and the HSCL have allotted to these workers plots measuring 100 to 250 square feet; the workers built houses on these plots without any financial help from their employers. Paku Bakhla is a fitter at HSCL and has been given a 10 x 12 feet plot. "I built my house for Rs 450", says Bakhla and adds that "the company is not ready to reimburse the cost." In that small hole, Bakhla sleeps with two children and his wife. At the Azad Busti, M D Raza, a rigger at HSCL, lives in a 10 x 10 feet room with his wife and five children. Living in these holes is nearly impossible in summer and the rains. Summer burns up the body, due to the fire from the factory and lack of electricity in the colonies. During rains the roofs leak and some are blown away. Winter makes the holes habitable only because the worker and his children huddle together. But winter also brings with it its own problem of keeping warm.

## RURAL POOR

# The Practical Tasks

Manu N Kulkarni

SINCE July 1975, when the Prime Minister's 20-point programme was announced, there has been a flood of concern for the poor. But no one seems to be concerned with the practical tasks of implementing the 20-point programme. Is the present administrative structure at the village, district, state and Centre designed to implement the various programmes effectively? If not, what are the new organisations needed? What are the managerial capabilities of the field personnel — such as the VLWs, Extension Officers, PWD Overseers, Revenue Inspectors, BDOs, Tehsildars — to implement the programmes? If the present rules of carrying on governmental business, particularly at the field level, have been an obstacle to the effective execution of the action-points, is there a will now to change them and who will make the changes? What are the lessons of earlier attempts to execute Plan programmes for the poor which can be fruitfully applied to the efficient management of at least some of the 20-point programmes. What should be the desirable interface between volun-

tary agencies, non-official party workers, and the bureaucracy engaged in the implementation of the programmes?

These are some of the issues to which serious thought has to be given. This note does not seek to provide ready answers, but attempts to focus attention on the dimensions of the tasks involved. Because of the author's acquaintance with rural administration, the discussion is restricted to those points which touch the rural poor.

The policy of distributing land to the landless — out of both the surplus accruing from the imposition of a ceiling on individual holdings and government wastelands — has been in existence even before the declaration of the 20-point programme. It is not the number of hectares distributed to the landless, but the manner of distributing the same and the subsequent management of these lands by the landless poor that really matter. At the tehsil level, which is the real unit for managing land resources, no proper assessment has been done of the complementary inputs needed for managing the lands granted. The ownership titles



(called 'pattas' in some states) were handed over to the landless with certain conditions of inalienability attached to them. The landless did not know what to do with these lands in the absence of inputs like credit, farm mechanical help to bring the lands under plough by clearing the shrubs, etc. The revenue agencies who conferred the land titles were not concerned with whether the recipients of the titles got other inputs necessary for cultivation. The lands were granted on 'restricted tenure' — i.e., the land grants were revoked if the lands were not brought under cultivation within a specified period. So the landless themselves had to approach development agencies — such as co-operatives, block agencies and commercial banks — for production finance. The pattern of financial assistance by the blocks and the co-operatives did not favour lending to cultivators of land on restricted tenure. The grantee was thus driven to the local moneylender. However, the moneylender could not get the lands under restricted tenure hypothecated to himself. Therefore, he required the grantee to 'permit' him to cultivate the granted land for some time. Ironically, this involuntary permission led to the gradual cornering of the lands newly conferred on the poor by the moneylender-landlords. In some states, the land was granted with the condition that its inalienability could be waived if the grantee could pay a specified amount as conversion fee — which in fact converted the 'restricted tenure' to 'full tenure'. This amount was paid to the state on behalf of the poor by the moneylender-landlord who then proceeded to acquire the now alienable title to the land. It has to be the responsibility of the public personnel in charge of administering the land distribution programme to prevent such loss of land by the landless.

The landless poor, who had briefly become landowners, have again swelled the ranks of rural landless labourers. The major task of the administrators of land distribution under the 20-point programme is, therefore, to plan at the block/tehsil level, for the various complementary inputs required by the land grantee to bring his small piece of land under plough. This has to be arranged, moreover, without any time-lag. The land tribunals, consisting of non-officials, cannot undertake this. Their preoccupation tends to be with the long-term viability of the distributed lands. The package of

administrative arrangements for the grantee — by the revenue department, commercial banks, co-operatives, development agencies for agriculture, irrigation and electricity — has to be monitored not from the state capital but from the tehsil or block. There has to be provision of credit for the land proposed to be distributed; of bulldozing and levelling of the land; of underground water detection; of electricity poles for energisation of pumps, etc. The package of facilities is intended so that the new cultivator is not forced to part with the granted land.

This means that the land distribution authority must also have the authority to ensure that complementary inputs flow to the grantee and that the production efforts of the grantee are not hampered by the co-operative inspector or the wireman of the electricity department, etc. It is the present inability of the land granting authorities to ensure the complementary inputs that has led to the frustration of the land distribution programme.

The programme to provide house sites to the rural poor also pre-dates the formulation of the 20-point programme. Some states had already distributed millions of square yards of sites to house the rural poor. The speed of distribution was so fast that the state administration almost lost control over town planning. Thanks to the enthusiasm of some officials, in some towns even vacant plots belonging to the rich were distributed to the poor — leading thus to litigation between the poor and the rich! In some villages, sites which had been distributed to the rural poor, were converted into playgrounds, threshing floors, sites for village fairs or circus — because those in charge of the house site distribution programme were not required to plan for the construction of huts or to ensure that the allotted sites were actually occupied in time. The co-ordinated planning of house sites distribution, designing of prototypes for new houses, provision of building materials, housing finance and civic amenities, were all splintered among several agencies of the tehsil or block.

Unfortunately, house sites distribution has been divorced from a housing programme. In some states, the housing portfolio is separated from the house sites distribution department. Housing finance for rural areas is, moreover, notoriously scarce. LIC, State Housing Boards, etc. address themselves to town and urban housing programmes since rural housing is commercially unattractive. The task of building thousands

of strong economical huts in a network of villages is stupendous. The rural housing programme — comprising allotment of sites, designing appropriate huts, getting them built, and having them in fact occupied by the poor — cannot be managed by remote control by the state secretariat. It is the taluk/block level officials who have necessarily to have responsibility and authority for this task.

One of the 20-points is the removal of bonded labour. A labourer in a village enters into the bondage of a landlord or a moneylender as a result of historical, social and economic circumstance. It is this circumstance that has to be changed. When the late Rajaji as Chief Minister of Madras got passed what was known as the Removal of Panyals Act, he seemed by a stroke of law to have abolished the Panyal system of bonded labour — most ruthlessly followed by the Mirasdars of Thanjavur. However, in fact, a large number of Panyals were quite simply thrown out of employment, and emerged as unemployed semi-agricultural labourers. This occurred because the state had no alternative employment planned for the Panyals.

Today, the primary task in the various states is to identify the various types of bonded labourers. Some systems are hereditary, some are casual, some practise bonded labour clandestinely. Having identified the bonded labourers and the material base of their bondage, the problem remains of providing a viable alternative to the labour so they are hereditary, some are casual, some bondage again. In some southern states, there are village carpenters, barbers, dhobis — all under bondage to the erstwhile landed gentry and the new rural rich. However, unless alternative sources of credit can be found for the bonded carpenter and the bonded barber, they will slide once again into bondage to the local rich. The public credit structure has failed to reach the rural poor. Abolition of private moneylending in the rural areas has to be accompanied by the capability to provide production as well as consumption finance to the rural poor. Rural banks have been formally designed to meet these realities in the rural areas. But they have not got off the ground.

Guarantee of a minimum level of agricultural wages is another of the points pertaining to the rural poor. The managers of the programme, however, have first to identify the wage market for agricultural labourers. Farming operations are time-specific



crop-specific and region-specific. For certain operations — such as transplanting of paddy — wages are higher than say for other intercultural or harvesting operations. Taking the block/tehsil as a unit, we can identify the agricultural labourers employed by middle and large farmers. As in any factory establishment, labourers and farmers who have employed them, casually and regularly, should be identified first. Then the minimum wages have to be fixed, considering the prevailing wage rates, both in kind and

## NORTH

### Little Headway in Land Reforms

IN both Punjab and Haryana, very little progress has been made in the distribution of surplus land. Although June 30, 1976, was fixed as the deadline for the actual distribution of such land, even the returns the landowners were required to file have not been completed. And, of such returns as have been filed the scrutiny is not yet over.

There is thus a wide gap between the high-sounding assurances at various levels about enforcement of ceilings and the actual performance. Most of the progress made in land allotment is of the surplus declared under the old Punjab and Pepsu land laws of 1953 and 1954 and not under the latest legislation on ceilings, the Punjab Land Reforms Act, 1972, which was framed with commendable speed, in accordance with the Centre's guidelines on the subject and which prescribes a 30-acre ceiling. Between July 1, 1975, and May 31, 1976, 629 standard acres were allotted under the old Punjab and Pepsu Acts to 126 beneficiaries. How many of these allottees have actually secured possession is, however, not known. It is only the paper work that has been completed in respect of these 126 landless people.

The state's performance in the allotment and handing over possession of land declared surplus under the 1972 Land Reforms Act is indeed tardy. Punjab's Revenue Minister disclosed on June 28 that, under the 1972 Act, 14,832 returns had been scrutinised; 1,957 hectares had been declared surplus; but physical possession of only 394 hectares had been taken. Of the 361 persons who had received 330 hectares of land, 154 (it is officially emphasised) were members of the scheduled castes.

cash, and the capacity of the local employers to pay. What is a far more crucial task is ensuring that the wages fixed by the block/tehsil officials are actually paid. The Thanjavur Agricultural Labourers Association has really played a pioneering role in getting a fair wage to the labourers. Because agricultural labour and the agricultural labour market are unorganised, the task of enforcing the minimum wage is difficult. In the absence of popular organisation today, the onus for its enforcement lies entirely on the bureaucracy.

Scrutiny of many applications was still in progress. The fact, however, that needs to be taken note of and which is officially conceded is that the landless applicants for surplus land numbered three lakhs. And the government now expects that a total of nearly 8,000 acres of land would be found surplus — a far cry from the estimate of 5 lakh acres officially given in 1972, and even from the revised figure given in 1975.

Of the several explanations that have been given for the lack of any notable achievement in the acquisition, allotment and (much more important) the handing over of actual possession to the landless, the following call for specific mention: interference by the courts (the Supreme Court rejected the state's application for stay of the operations of the High Court order on the definition of the 'family' in the 1972 Act); procedural difficulties; and continuous, often irresistible, pressure by the landlords' lobby and government's unwillingness to risk losing political support from this influential section. In view of the hurdles, the state government has informed the Centre that it would require some more time to complete the work of actual distribution of surplus land. The obstructive role played by litigation in the implementation of even earlier land reforms is clear from the fact that out of the 1,74,112 standard acres of land declared surplus under the old Punjab and Pepsu Acts 76,638 acres were still not free from litigation.

Haryana's record in allotting surplus land and in giving actual possession seems to be even more unsatisfactory. Finding the task a difficult one, the state government has simply postponed the June 30 deadline to December

31, 1976. Legal difficulties are mentioned here as the principal reason for the undue delay. But, as in Punjab, the total surplus land expected to become available for distribution to the landless is much less than the original estimate. The surplus now expected is about 44,000 ordinary acres, which the government hopes to distribute by the end of the year. The area to be allotted to each applicant would be a maximum of 5 acres, in most cases less. The state authorities' calculation is that, when the process is completed, proprietary rights would be vested in about 50,000 hitherto landless cultivators. Whether this hope will materialise, and in how many years, remains to be seen.

Fairly good progress, however, has been made in Haryana in allotting and distributing surplus land under the old Punjab and Pepsu laws, enacted when Haryana was part of united Punjab. By the end of 1975, the government claims, 55,000 standard acres of such land had been distributed among 35,000 tenants. But, in June 1975, before the promulgation of the Emergency, 51,000 ordinary acres of land had still to be disposed of and were lying unutilised. The distribution of the remaining surplus under the old land laws is expected to be done by August 31.

While in Punjab the filing of returns has been completed by a majority of the landowners, in Haryana fresh returns have been asked for by the state government before July 14, in accordance with the amendments to the 1972 Act, made by ordinance on May 8 last. The first amendment overcame the difficulty stemming from the definition of the 'family' in the 1972 Act which was struck down by the High Court, and the second (actually it made several changes in the Act) was in accordance with the recommendations of the Chief Ministers' Conference. The ordinance eliminated lawyers from the proceedings under the Act and enhanced the penalties for false declarations by landowners. The old returns therefore are not deemed valid now. For these reasons ostensibly, the state's progress in redistributing surplus land among the needy under the 1972 Act is virtually nil. According to the original estimates, about 44,000 acres were expected to become available. But the state has made commendable progress in distributing housing plots, and about 86 per cent of the eligible rural poor are stated to have received such plots.



# India and ASEAN

(From a Special Correspondent)

TOWARDS the end of June, India's Deputy Minister for External Affairs, Bipinpal Das, completed a 10-day tour of four of the five countries of the Association of South-East Asian Nations (ASEAN). He did not visit the fifth member, Indonesia, because the Minister for External Affairs, Y B Chavan, will go there in July for the annual bilateral talks.

In Thailand, Malaysia, and the Philippines, Das was received not only by the Foreign Ministers of these countries but by heads of government too — Seni Pramoj (Thailand), Dato Hussein Onn (Malaysia), and Marcos (Philippines). In Singapore, Das had talks with the Foreign Minister, S Rajarathnam. India has friendly relations with all of them and no outstanding problems with any of them. Hence they echoed India's desire to increase bilateral trade, exchange technology, and provide opportunity to Indian investors for setting up more joint ventures in their territories. Already, there are about 30 joint ventures with Indian participation operating in these countries. Most of them are in the field of textiles. India also wants closer cultural relations with these countries and so hopes to sign cultural agreements with Thailand, Malaysia, and Singapore.

Das told the leaders he met in these countries that India fully supports the ASEAN objective of establishing a zone of peace and neutrality in South-East Asia. The other stated objective of ASEAN — *viz.* to establish friendly relations with the new governments in Indochina — is also one to which India has pledged support. However, despite ASEAN's professed desire to emerge free from the influence of big powers, big power influence is deeply entrenched in these countries. The Philippines houses major US military bases. The US bases function there as independent enclaves. The Philippines now wants to exercise sovereignty by bringing all US troops stationed there under its own laws. As yet, these US troops are not governed by the Philippines laws. Even if an American soldier kills a Filipino, he cannot be tried by the Philippine authorities. Negotiations are going on between the US and the Philippines on the subject of jurisdiction over US bases there. However, the underlying question of the very presence of US military bases there

has not been raised. Once major US military bases are allowed to remain on Filipino soil by the Philippines government, its claim that it wants to create a zone of peace, freedom, and neutrality in South-East Asia loses credibility. It may pay a lot of lip-service to the idea of an independent South-East Asia, but in effect it has chosen to remain tied to the apron-strings of a super-power. The US bases in the Philippines have been used for waging wars in Asia — in Vietnam, in Cambodia, and in Laos — and they could continue to be thus used should the occasion arise.

Malaysia and Singapore have Australian Air Force bases. Singapore also has New Zealand troops based in it. True, Malaysia has said that, with the expansion of its own air force, it will phase out the presence of the Australian air force from the base in Butterworth. And Singapore and New Zealand have yet to negotiate the continuance of New Zealand's military presence in this island republic beyond next year when it is expected to end by present arrangement. But, though it is a signatory to the Kuala Lumpur Declaration on the setting up of a zone of peace, freedom, and neutrality, Singapore actually maintains that it wants the continued presence of all major powers in this region ostensibly to balance one another's influence.

In Thailand, as a result of much public pressure, the Americans have withdrawn their fighting forces and handed over their military bases to the Thai government. These were military bases that had been directed against Vietnam, Cambodia, Laos, and even China, and were fully used for waging wars in the Indochina countries. The two major US spy bases — at Ramasoon and near Lampang — and several minor ones, are used for monitoring movements within the Indochina countries. The very basis of their existence is hostility towards the people of Laos and Vietnam and Cambodia. The Americans have said that they are going to train Thais to run those bases. But the question is: whether they are run by the US or by Thais trained by the US, what is the purpose of these spy bases? Is it not the continuance of hostile activity towards the Indochina neighbours? Thailand has not made that clear. All it has said, so far, is that the bases

would be run for Thailand's own use. But the people in the region know very well what their use is. And the Indochina countries cannot accept the expressions of friendship towards them from Thailand, unless they know that Thailand has stopped all hostile activities against them.

It is by now well known that a lot of the activity to sabotage the work of the new government in Laos is planned on Thai territory and is actually carried out from there — even if perhaps not with official blessing. One cannot expect Laos to accept the protestations of friendship from some ministers in Bangkok in such circumstances.

Thailand continues to be the centre of hostile propaganda towards Cambodia. All the stories in the Western Press, about Cambodian soldiers perpetrating brutalities on peasants, were manufactured by persons who had been given free access to Thailand's border with Cambodia to return with untrue, and most hostile, stories. During the elections in Thailand in April, one of the biggest Thai newspapers printed a pageful of photographs showing, for instance, Cambodian soldiers driving teams of peasants to pull ploughs in place of draught animals — photographs which were not taken in Cambodia but elsewhere, and with scenes enacted especially to defame the new Cambodian regime.

In view of all these realities and contradictions, it is going to take the three Indochina countries quite some time to accept that the five members of ASEAN mean well by them and want to co-operate with them to establish an independent zone of the entire region, of which Indochina is an integral part.

Further, one would have to examine what kind of unity the ASEAN countries have. At their Bali summit in February, the ASEAN heads of governments declared that they not only wanted cultural and economic unity — for which the Association was set up nine years ago in Bangkok — but political unity, too, among its members. Yet, what has happened since then is particularly discouraging. Two ASEAN neighbours — Thailand and Malaysia — openly fell out with each other over the question of the presence of Malaysian forces in southern Thailand to fight the communists there. In June Malaysia was forced to withdraw its forces, and its leaders have since made no secret of their view that Thailand is reluctant to fight communist forces along its border with Malaysia because it thinks that these communist forces



pose a danger to Malaysia alone.

Similarly, instead of the hope for free trade among ASEAN members, restrictions have been placed recently by Indonesia on Singapore's trade with it — with the result that, reportedly, goods worth one billion Singapore dollars meant for export to Indonesia are now lying in warehouses in Singapore. This has, moreover, greatly upset bank credit to traders in Singapore and has adversely affected trade there. Since Singapore does a lot of third-country trade, a number of countries which sent goods to Indonesia through Singapore

are also affected by this choking up of goods in Singapore's warehouses.

With the ASEAN region facing such serious economic, political and social problems, third countries can do little to solve them. On the other hand, the major powers with economic and political stakes in ASEAN manipulate developments in this region to safeguard their own interests. That such manipulation does not succeed in the long run is to be seen from what has happened in Indochina. Ultimately, it is the wish and struggle of the people of the region which prevails.

days of fighting against the aggressors to save the country.

Le Duan's report also dealt with the drafting of a new constitution, and the principles concerning the state system pending a new constitution.

On June 29, many deputies urged the National Assembly to create favourable conditions for the provinces to develop in all fields — economic, cultural and social — thus contributing to the building of a unified and socialist Vietnam. Lawyer Nguyen Huu Tho said: "The National Front for Liberation as well as the Vietnam Alliance of National Democratic and Peace Forces have completed their historic task but the mission of uniting the entire people never ends. Based on the worker-peasant alliance, the national united front must embrace all the Vietnamese patriots and advocates of socialism. The enemy has played havoc with every Vietnamese family. To make the healing of the wound more effective, everyone must concentrate great efforts on the cause of national construction to create a new joy for our generation and a lasting happiness for generations to come." Nguyen Huu Tho concluded: "As for us, the future of a prosperous and happy Vietnam is no longer far off. Now begins the realisation of our nation's dreams." The session will continue until a new government of reunified Vietnam is elected.

In its editorial on June 28, the Hanoi paper, *Nhan Dan*, pointed out: "This historic session of the National Assembly of Vietnam will achieve the complete reunification of the country on the state plane and Vietnam will have a unified state, a socialist, proletarian dictatorship and new type of state." Quoting First Secretary Le Duan, *Nhan Dan* said: "The economic transformation and economic construction, the stepped-up socialist revolution in ideology and culture, the fostering of the new man has one purpose: to build a system of socialist collective mastership of the society. The exercise of collective mastery of a society by the working class whose nucleus is the worker-peasant alliance through the state under the leadership of the vanguard party of the working class is proletarian dictatorship. Our state, therefore, is a state of proletarian dictatorship." The paper noted that these conclusions are imbued with the principles of Marxism-Leninism drawn from the practice of many decades of building the revolutionary power in Vietnam and also from the rich experiences of the other socialist countries.

## VIETNAM

# First Steps in Unification

Harish Chandola

THE first session of the National Assembly of unified Vietnam opened at the Ba Dinh Congress Hall in Hanoi on the afternoon of June 24. 492 deputies from 38 provinces and cities attended the session, cherishing feelings of joy over the country's reunification. There was a red banner with a golden star on the green screen of the platform and a statue of Ho Chi Minh stood in front of it. When Presidium members (Ton Duc Thang, Nguyen Luong Bang, Le Duan, Troung Chinh, Pham Van Dong, Pham Hung, Nguyen Huu Tho, Huynh Tan Phat, Vo Nguyen Giap, Hoang Van Hoan, Nguyen Duy Trinh, Le Thanh Nghi, Van Tien Dung and Trinh Dinh Thao) mounted the platform, they were greeted with warm applause. Children presented them with flowers.

Nguyen Huu Tho delivered the opening speech on behalf of the Presidium. He said: "This legislature will continue the cause of the previous ones which have succeeded one another since our people seized power in the August revolution of 1945. As the outcome of the great victory of our people in their resistance to the US aggression and for national salvation, this National Assembly will mobilise the entire people in a patriotic emulation movement for healing the wounds of war, completing national reunification, taking the whole country to socialism quickly, vigorously and steadily." Then, Troung Chinh, President of the National Electoral Council, made a report on the general elections held on April 25, 1976. He said: "The general elections to the National Assembly were an extremely important revolutionary movement. It is a victory of historic significance, the greatest political victory ever won by our people

since the 1975 spring victory. It reaffirmed our entire people's iron determination to overcome difficulties and build a peaceful, independent, unified and socialist Vietnam. The success of our people in the elections is at the same time a bitter failure for the imperialists and colonialists, old and new, and their lackeys who schemed to keep our country divided permanently and to put the yoke of slavery on our people again."

On the following day (June 25), Le Duan, First Secretary of the Central Committee of the Vietnam Workers' Party, delivered a report entitled "Let Our Entire People Unite To Build Our Reunified And Socialist Fartherland Vietnam." In his report, Le Duan said that with the total and complete victory of the fight against US aggression and for national salvation, the Vietnamese revolution had moved into a new stage, the stage of socialist revolution. He said: "The strategic task of the revolution in our country in the new stage is: to achieve reunification of our homeland and to take the whole country rapidly, vigorously and steadily to socialism. The north must give a strong impulse to the building of socialism and perfect the socialist production relations; the South must carry out at the same time socialist transformation and socialist construction." Le Duan said that all compatriots, combatants, cadres and party members must have a new determination, new capacities, and the spirit of revolutionary offensive and perseverance in struggle for the complete victory of socialism. The working class and working people as a whole must march forward vigorously with the same revolutionary zeal and ardour as in the



## Multinationals in Africa

Amiya Bagchi

**Multinational Firms in Africa** (ed) Carl Widstrand; African Institute for Economic Development and Planning, Dakar and Scandinavian Institute of African Studies, Uppsala, 1975; pp viii + 426.

ON Africa fell the first shadows of European mercantilist enterprise when Henry the Navigator sent his explorers along the Coast of Guinea in search of gold, slaves and souls for saving, and the last shadows of old style colonialism and racism have not yet lifted from that continent. The darkness of Africa was the darkness of the worst excesses of European exploitation of other continents. Raiding of Africa for slaves preceded the "discovery" of the western hemisphere. But the slave trade from Africa to the Americas began in real earnest when the Spaniards managed to depopulate a whole continent (Mexico, Guatemala, Colombia and Peru) and a whole archipelago (the islands of the Caribbean) in the space of less than a century. The slave trade reached a peak in the late eighteenth century — precisely when the Industrial Revolution was turning England into the workshop of the world — and the leading capitalist country of the day was also the leading "slaver" of the world. Scarcely had the legal trade in slaves ended when the new scramble for Africa began, and Africa experienced all over again the barbarism of metropolitan capitalist civilisation in all its horrors.

Bourgeois economists have tried sedulously to avoid talking about such "physiocratic" notions as transfers of labour power, products and resources from Third World countries to the metropolitan nations and their colonies. Instead, accountants' fiction in the form of capitalised values of naked plunder by foreigners have been adopted and propagated as "foreign investment" by metropolitan countries in the colonies. In the case of Africa excluding the racist Republic of South Africa such camouflaging devices have not been very effective, because the plunder was almost always removed fully, and so the accumulating balance of reinvested profits did not look impressive. This in turn provided an excuse for launching an attack on the Leninist theory of imperialism on the ground that if the total value of capital exported to Africa was small, economic motives could not be important for the conquest of Africa. It has been shown (a) that this

attack is based on a deliberate misrepresentation of the Leninist theory and (b) that plenty of direct economic motives could be found in the actions of Rhodes, Lugard and King Leopold of Belgium, but the canard is still propagated by bourgeois economists and historians.

Some of the essays in the present volume open with a description and analysis of the historical background to the present state of imperialist exploitation of particular countries or regions. To an economist or economic historian who is not specialised in Africa, these are perhaps the most illuminating essays in the volume. In this category can be classed Jan Jelmert Jorgensen's paper on Kenya, Lars Bondestain's paper on Ethiopia, Ikenna Nzimiro's paper on Nigeria, Tetteh O Kofi's paper on the operations of multinational corporations in cocoa marketing, M K K Kabala Kabunda's paper on the operations of Unilever in Zaire, C Y Thomas paper on the process of industrialisation in Africa as a whole and Helge Hveem's paper on direct foreign investment in Africa. The last paper is flawed by the curious omission of the Republic of South Africa as a field of foreign investment. In fact, South Africa is the biggest magnet for foreign investment from the developed capitalist countries, and this has very important implications for the stability of the racist regimes of Rhodesia (Zimbabwe) and South Africa, and their client states such as Malawi or Lesotho, which act as labour reserves for South Africa. Besides the above papers, there is a good, informative paper on the multinational corporations in oil industry by Biplab Dasgupta and a rather superficial case study of technology transfer mechanisms in Colombia and India by John Carlsen. Then there are two papers concerned with medium-term strategies of nationalist regimes (under state capitalism) in dealing with foreign investment and multinational corporations by R H Green and Peter Neerso, both of which draw heavily on Tanzania's experience. Besides these there are three papers — by Samir Amin, Norman Girvan and G Massiah — which discuss, on a glo-

bal scale alternative strategies for liberation of the underdeveloped countries from colonial and neocolonial alliances. Clive Y Thomas' paper, already mentioned above, also suggests an alternative strategy for such liberation.

The papers on Kenya, Nigeria and Zaire bring out clearly that the forcible uprooting of the peoples of the Third World from their land directly for the benefit of European settlers and more generally for the traders, bankers and processors of agricultural land was continuing well into the fifties of this century. They also bring out how various kinds of non-market coercion and monopolistic restrictions were used to deprive ordinary Africans of the fruits of their labour. Simultaneously upper class Africans were debarred from the opportunity of challenging the hegemony of the expatriate businessmen, executives and companies in business and professional careers. In many countries Asian or Southern European traders (Indians and Arabs in East Africa), the so-called Levantines in West Africa acted as the junior partners in the business of exploitation, and they often experienced the backlash of African revolt more intensely than the Europeans and Americans who were more immune to pressures by the new nationalist but upper class-dominated governments in the newly liberated countries.

Africa remained the preserve of the old-style colonialists longer than Latin America or Asia. Not only was the UK the most important colonial power in terms of its size of foreign investments in Africa, but Portugal retained its direct dependencies in Africa until last year. Some economists and students of politics had hoped that because Africa was liberated politically in an era in which socialism had triumphed in major parts of the world, the peoples of Africa might be able to skip the horribly wasteful stage of dependent capitalism and directly bring about a socialist transformation in their lands. The triumph of the Angolan freedom movement under the leadership of Agostinho Neto would seem to have strengthened these hopes.

A reading of the experiences of particular African countries would, however, tend to indicate how shaky the foundations of such hopes are. On the one hand, countries like Guinea which started with a record of militant anti-imperialism and intention to implement full-scale socialism have not been ab-



to escape dependence on foreign firms engaged in the processing and export of minerals and other raw materials. Even Zambia under the leadership of Kaunda which seemed to have succeeded in getting rid of dependence on foreigners in its most important natural resource — copper — found itself in the company of Zaire and South Africa in the recent struggle over Angola. To confuse the optimist even further, Zaire has followed many policies fostering economic nationalism which used earlier on to be associated with "progressive" regimes only. And Kenya, with a record of a violent anti-imperialist struggle, has remained firmly within the camp of "liberal" underdeveloped regimes, allowing multinational and other foreign firms to retain a grip over a large part of its industrial, financial and agricultural processing sectors. (But, of course, the regime in Kenya is as illiberal as that in many states professing state capitalism and one-party rule.)

On the other side, while blatantly oppressive and discriminatory policies were being followed by colonial regimes in Africa, multinational firms such as Unilever and Royal Dutch Shell were extending their network in more than one country of Africa. When political independence came, many multinational corporations were ready to use their vantage positions in trade, finance and agricultural production and processing to move into protected positions in import substituting industries. At the same time, South Africa remains the home *par excellence* of large corporations (one of which, De Beers, markets diamonds for the Soviet Union, and retains an effective world monopoly). In many cases development corporations — set up by the governments of the newly-liberated corporations — became willing collaborators of foreign companies in allowing the latter to retain effective control of enterprises in both old and new industries and in coercing labour to accept low wages in the name of national interest. Soley gives a detailed description of this process in the case of a monopolist cement company in western Nigeria before the military coup. This attitude of government corporations sprang partly from an excessive respect for the 'expertise' of the foreigners and partly from less reputable causes. Neerso provides an example from Tanzania where the Chinese collaborated directly with the Tanzanian government to set up a textile mill which used labour-intensive methods whereas a state-controlled development corporation went out to set up a highly capital (and foreign exchange)

intensive textile factory in the name of efficiency.

Norman Girvan in his incisive paper has shown how mere economic nationalism or preparedness to bargain toughly with multinational corporations is not enough to remove the structural causes of neo-colonialism in underdeveloped countries. (This is something Green fails to concede in spite of his wide-ranging experience.) One main reason for the failure is that economic nationalism is being pursued in most countries as a revolution from above, which keeps the internal social structure essentially intact. From this point of view, there are disturbing similarities between the actual policies being pursued by the pro-Western regime in Iran and the socialist regime in Libya. Progress in history is not obviously a linear one: second-best solutions in the form of a quick elimination of foreign firms by using administrative methods without a change in the internal power structure can lead to its own contradictions and pile up problems for the future. While Thomas pleads eloquently for autonomous development of small countries by matching resources to needs, he is totally silent on the political or social process which can bring this about.

For all its speculative brilliance, Samir Amin's introduction to this volume is slightly disappointing precisely because it fails to emphasise the dialectical process through which true progress can take place. He has conjured up two visions of world capitalist hell. One is an ultra-centrist one in which

all real production is ultimately concentrated in the centre countries, with citizens of all other countries inhabiting a devastated periphery. The other is a model in which capitalist industrial production is diffused to more and more countries, and the binding thread is presumably provided by a state of technological dependence. Amin has also conjured up a Soviet mode of production "which cannot be reduced to the capitalist mode": "The Soviet mode a *sui generis* mode, is not the expression of the backwardness of the productive forces. On the contrary, although production relations here are class relations, they have reached a more advanced stage than in the West: here the total centralisation of capital heralds [Orwell's] 1984. That gives the political power a predominance it lacks in the capitalist mode" (p 17). Will the Soviet Union's backing of economic nationalism in Africa (or Asia) lead to the generalisation of this so-called "Soviet mode" (supposing one admitted its *sui generis* nature) or will it help the diffusion of industrial capitalism by other names? Perhaps the intercountry and interclass relations are too much under flux for anybody to attempt a confident answer to such a question.

This volume will be of considerable use to all who believe that political economy is the only possible framework within which questions of nation — or world-wide — significance can be faithfully debated. It is a matter for congratulation that such a volume could be produced with the joint sponsorship of a UN agency.

## FULCRUM

August 1976 Vol. 2 No. 1

**WILL THE BLACKS BE SENT BACK?** In this month's **London Letter**, **Farrukh Dhondy** investigates the racial situation in the notorious East End of London.

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This is only an announcement and not a prospectus.

# CEEKAY



## CEEKAY AUTOMOTIVE PRODUCTS LIMITED

(Incorporated on 3rd November, 1973 under the Companies Act, 1956)  
Registered Office & Factory: Plot L-4 MIDC Industrial Area Chikalthana Aurangabad 431 001 Maharashtra.

Announcement regarding the Public Issue of 3,00,000 Equity Shares of Rs. 10/- each for cash at par. An application will be made to the Stock Exchange, Bombay for permission to deal in, and for an official quotation of the Equity Shares of the Company, now being issued and the already issued.

The subscription list will open at the commencement of Banking hours on Wednesday, the 14th July, and will close at the close of Banking hours on Saturday, the 24th July, 1976 or earlier at the discretion of the directors, but not before the close of Banking hours on Saturday, the 17th July.

Application forms with copies of the prospectus may be obtained from the Registered Office of the Company, Underwriters, Brokers to the Issue and Bankers to the Issue, named herein.

### HISTORY AND BUSINESS OF THE COMPANY

#### INCORPORATION

The Company was incorporated on 3rd November, 1973 under the Act, as a public limited company and obtained the certificate of commencement of business on 29th March, 1974.

The objects for which the Company has been incorporated have been stated in the Memorandum of Association. The main objects of the Company include inter alia the manufacture of carburettors and carburettor kits, clutch plates and clutch cover assemblies.

#### PROMOTERS AND MANAGEMENT

The Company has been promoted by M/s. K. Chinai Industries, which was a partnership concern of the late Mr. Babubhai M. Chinai and Mr. Mahesh B. Kothari. The late Mr. Babubhai Chinai was also one of the first Directors of the Company until his sad demise.

The Company has on its Board eminent industrialists and a well-known Financial Consultant such as Mr. J.H. Doshi, Mr. Pravinchandra Gandhi, Mr. Prem Chand Jain and Mr. D.M. Dahanukar with Mr. Harish Mahindra as the Chairman. Their advice and guidance would be invaluable to the Company.

Day to day management of the Company vests with Mr. Mahesh B. Kothari and Mr. Pradeep B. Chinai, who have been appointed Executive Directors.

Mr. Mahesh B. Kothari is a Graduate in Mechanical Engineering with considerable experience in the Automobile Ancillary Industry. He has worked with Ford Motor Company, U.S.A. and Mahindra & Mahindra Ltd., India.

Mr. Pradeep B. Chinai is a Graduate in Engineering (USA) and holds a Masters Degree in Business Administration, also from USA, with specialisation in Finance & Marketing. He has to his credit considerable experience in finance, marketing and administration, having worked with the Ashland Oil Inc., USA.

Mr. Mahesh B. Kothari and Mr. Pradeep B. Chinai are professionals and have been associated with the Company right from its inception.

### THE PROJECT

The Company is setting up a plant for the manufacture of 1,00,000 carburettors and carburettor kits, 1,00,000 clutch plates and 50,000 clutch cover assemblies, in the MIDC Industrial Area in Chikalthana, Aurangabad, which is a notified backward area in Maharashtra.

The Company has obtained the necessary industrial licences for the manufacture of the above products. The installed capacity will be same as the licensed capacity.

### LOCATION OF THE INDUSTRY

The Company has acquired approximately 20,000 square metres of land in the MIDC Industrial Area at Aurangabad, Maharashtra.

### PROGRESS MADE SO FAR

Key Activity	Status
1. Government Approvals	
a) Industrial Licences	Have been obtained.
b) Foreign collaboration approvals	Have been obtained.
c) Foreign collaboration agreements	Have been executed and taken on record by the Government.
d) Import licence	Has been obtained.
2. Acquisition of land	Land is in possession of the Company.
3. Power	Has been sanctioned.
4. Construction of Factory Building	Has commenced. Targeted for completion by June/July 1976.
5. Acquisition of Plant & Machinery	Machinery ordered and deliveries commenced.
6. Recruitment of Personnel	Senior technical personnel recruited.
7. Proto-type testing (Carburettors)	Under testing by leading users. Approvals from two users obtained.
8. Commercial Production	Targeted by Fourth Quarter 1976.

### FOREIGN TECHNICAL COLLABORATIONS

The Company has obtained technical knowhow from Societe Europeenne de Carburateur, France (SEDEC), for the manufacture of carburettors and carburettor kits and from Daikin Manufacturing Company Ltd., Japan (DAIKIN) for clutch plates and clutch cover assemblies.

SEDEC is a French Subsidiary of a large German group, known as the Pierburg Group. This group has manufacturing facilities and licences in 5 countries and markets well known brands of carburettors such as Zenith, Bing, Stromberg, etc. throughout Europe, Mexico and Latin America.

DAIKIN is a leading manufacturer of clutch plates and clutch cover assemblies. It controls about 35% of the original equipment market and 65% of the replacement market in Japan. The annual sales of clutch plates and clutch cover assembly of DAIKIN is about Yen 12.2 billion.

### FUTURE PROSPECTS AND PROFITABILITY

Based on the present progress of the project, the Company expects to commence commercial production in the Fourth Quarter of 1976. There is a ready market for the products to be manufactured by the Company. This market is expected to grow and the Company does not anticipate any difficulty in selling its products. The Directors are of the opinion that barring unforeseen circumstances, the Company will make sufficient profits to pay a reasonable dividend within a reasonable time.

### BOARD OF DIRECTORS

Name, Address and Description	Other Directorships
<b>HARISH CHANDRA MAHINDRA</b> (S/o. Late Shri Jagdish Chandra Mahindra) 'Sahil' Apartments 14, Altamont Road, Bombay 400 026. Chairman Industrialist	Chairman of: Mahindra Ugone Steel Co. Ltd. etc. Executive Director of: Mahindra & Mahindra Ltd. Director of: International Tractor Co. of India Ltd. Ceat Tyres of India Ltd. Ex-President of: Federation of Indian Chambers of Commerce and Industry

<b>JAGJIVANDAS HIRALAL DOSHI</b> (S/o. Late Shri Hiralal K. Doshi) Bindu, Irla Bridge, Swami Vivekananda Road, Vile Parle, Bombay 400 056. Industrialist	Chairman of: Amar Dye Chem Ltd. etc. Director of: Hyderabad Carbons & Chemicals Ltd. etc.
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<b>PRAVINCHANDRA VARJIVAN GANDHI</b> (S/o. Late Shri Varjivan K. Gandhi) Amelli, 6th Floor, Nepean Road, Bombay 400 006. Financial Consultant	Director of: Delhi Cloth & General Mills Co. Ltd. etc.
---	---

<b>PREM CHAND JAIN</b> (S/o. Shri Shriyans Prasad Jain) Shikar Kunj, 29A Carmichael Road, Bombay 400 026. Industrialist	Managing Director of: Plastics Resins & Chemicals Ltd. Director of: Dharamgharia Chemical Works Ltd. etc. Vice-President of: Indian Merchants Chamber
---	--

<b>DATTATRAYA MAHADEO DAHANUKAR</b> (S/o. Late Shri Mahadeo Dahanukar) 'Ratnakar', 26, Dr. B. J. Road, Off. Narayan Dhabolkar Road, Bombay 400 006. Industrialist	Managing Director of: The Maharashtra Sugar Mills Ltd. etc. Director of: Schrader-Schall Duncan Ltd. etc.
---	--

<b>MAHESH MOHAIL KOTHARI</b> U.S. Mech. Eng. - U.S.A. (S/o. Late Shri Mohail C. Kothari) 7, Anand Dargshan 13, Dr. G. Deshmukh Marg (Peddar Road), Bombay 400 026. Executive Director (Technical)	
--	--

<b>PRADEEP BABUBHAI CHINAI</b> B.S. (Eng.), M.B.A. (U.S.A.) (S/o. Late Shri Babubhai M. Chinai) St. James Court, Marol Drive, Bombay 400 020. Executive Director (Administration) Business/Company Executive	Director of: Chemicals & Machinery Ltd.
--	--



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Issued, Subscribed  
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10,000 Equity Shares of  
10/- each allotted  
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directors, their friends  
relatives Rs. 20,00,000  
s: Calls in  
arrears\* Rs. 1,18,000 Rs. 18,82,000

Present issue offered  
to the Public for  
cash at par  
10,000 Equity Shares  
Rs. 10/- each Rs. 30,00,000

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Application	2.50
Allotment	2.50
Balance shall be payable in two calls at such time as may be determined by the Board of Directors of the Company provided that there shall be an interval of at least one month between any two calls and between the allotment and a call	5.00
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## SOLICITORS

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## HOW TO APPLY

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- Opening Date: Wednesday, July 14, 1976.
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**ISSUE OPENS ON**  
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# Pattern of Asset-Holding in Rural India

## A Study of Top Asset-Holders

Sreelekha Basu

*Most studies of asset distribution take the whole population surveyed as one group; and predictably, in a country like India the concentration ratio of asset distribution turns out to be very high.*

*However, for formulating tax policies and other redistributive measures, such aggregative measures of inequality of asset distribution do not help. What is needed is information about the distribution of assets among the top asset-holders.*

*Using the summary results of the first schedule of the Reserve Bank's All-India Debt and Investment Survey (1971-72), this paper attempts to identify the problems involved in investigating the relative inequalities in asset-holding among the states and within the group of rural households who may be described as "property owners".*

IT is an accepted fact that asset holding in India has always been highly concentrated. All over the country there is glaring evidence of concentration of wealth. But we have hardly any administrative records or systematically collected data to attempt regular, organised study of wealth distribution. Keeping in view the phenomenal increase in asset accumulation by a certain section of our community after independence, and our resource requirements for planning, a thorough analysis of the wealth of the affluent class has long been overdue.

The foremost objective of Indian planning has been removal of social and economic inequalities through maximisation of national income and redistribution of the same (and/or of consumption), transferring a certain portion of the existing stock of assets to the poorer section of the society, social investment for the benefit of this group in the form of educational and medical facilities and other public facilities, nationalisation, credit planning, creation of infrastructure facilities, and so on. The poor in the country, more so in the rural areas, have to accumulate sufficient means of production to have adequate and self-sustaining levels of income over time.

However, no organised probe into the dimensions of inequality in wealth distribution could be undertaken owing mainly to statistical deficiencies. The RBI has conducted a couple of surveys on debt and investment, at ten-year intervals, furnishing valuable statistics on the distribution of assets in the rural areas. But the data furnish-

ed have been grossly inadequate for a thorough probe into the distributional aspects of wealth among the rural poor, and specially among the rural rich. The All-India Rural Debt and Investment Survey (AIRDIS: 1961-62) and the All-India Debt and Investment Survey (AIDIS\*: 1971-72) collected basic information on the distribution of assets among rural households. The AIRDIS (1961-62) did not furnish data on the total number of households. AIDIS (1971-72) covered about a lakh of rural households, and estimated the total number of rural households at 78 millions on June 30, 1971. However, the state-wise number of households surveyed during 1971-72 is not available from the reports so far published. AIDIS collected detailed information on various aspects of asset holdings, debt, borrowing, investment, etc, not only for each state but also for broad regions within the states.

Summary results of the first Schedule of the 1971-72 Survey, relating to assets and liabilities of rural households, as on June 30, 1971, have recently been published. This note is mainly based on the data presented in the summary results. For broad comparison over the period, some use has also been made of the 1961-62 Survey results. The results (1971-72) so far presented, however, are not adequate to analyse the various distributional aspects in depth, especially for use of policy analysts, administrators and planners. But it is expected that the statistics collected through AIDIS, when finally and meaningfully processed, would go a long way in overcoming

the deficiencies in the existing data on wealth accumulation in the country and other related problems.

In this paper, an attempt is made to study the ownership and access to assets of rural households in India. It investigates and determines the degree of inequality amongst the richer households in the country. The common method of analysing inequalities in income or wealth distribution has been to arrange the income/wealth shares of groups of households in ascending order of income-received/wealth-possessed, arrange them in fractiles/percentiles, prepare models of distribution (or generation) of income/wealth, and then estimate the parameters of the distribution; finally, to work out overall inequality measures such as Gini co-efficient, T-index, Kuznet's index, and so on.

However, most of the studies take the whole population surveyed as one group; naturally, in a developing country like India, we find the concentration ratio of asset distribution as high as 0.6611. From the point of view of redistribution, because of the highly aggregated data at the upper end, overall measures of inequality compiled from the series hardly help. Information needed, for example for the imposition of wealth-tax and for related administrative and policy formulation purposes relates to households belonging to high income/asset groups. For wealth distribution studies, we would like to have detailed statistics relating

\* This Survey also covered about 50,000 households in the urban India, reports on which are still awaited.



TABLE 1 : PROPORTION OF LAND AND OTHER ASSET HOLDINGS AND RELATED STATISTICS BY STATES : JUNE 30, 1971

State	Percentage of Asset Holdings in						Percentage of Households		
	Land	Buildings	Livestock	Household Goods	Others	Total	With No Land	With Land Less Than 0.50 Acre	With More Than 30 Acres
Andhra Pradesh	68	16	7	5	4	100	9.73	31.57	1.34
Assam	60	21	8	5	6	100	18.76	10.82	0.61
Bihar	74	15	4	3	4	100	2.79	38.15	0.22
Gujarat	57	19	9	6	9	100	16.31	20.80	2.98
Haryana	72	14	6	3	5	100	7.68	36.21	2.53
Himachal Pradesh	52	32	8	6	2	100	4.40	12.38	0.66
Jammu and Kashmir	55	26	11	5	3	100	1.07	11.69	0.02
Karnataka	65	19	7	4	5	100	16.50	15.93	2.19
Kerala	63	25	1	5	6	100	11.93	43.53	0.08
Madhya Pradesh	65	16	10	6	3	100	7.74	17.68	3.06
Maharashtra	71	15	6	3	5	100	15.78	18.10	3.71
Manipur	57	25	7	6	5	100	4.33	20.32	0.04
Meghalaya	56	25	9	7	3	100	6.60	13.55	0.04
Orissa	66	19	6	5	4	100	6.90	25.53	0.31
Punjab	72	14	5	3	6	100	4.74	50.94	1.14
Rajasthan	56	18	13	8	5	100	4.01	12.46	7.45
Tamil Nadu	65	17	4	6	8	100	16.89	35.73	0.25
Tripura	77	11	5	4	3	100	12.97	15.19	0.07
Uttar Pradesh	66	19	6	5	4	100	3.11	27.39	0.30
West Bengal	60	24	5	5	6	100	11.30	36.84	Nil
Delhi	59	23	6	4	8	100	26.05	38.77	0.40
All-India	66	18	6	5	5	100	9.34	27.63	1.40

TABLE 2 : PROPORTION OF TOTAL ASSETS SHARED BY VARIOUS GROUPS OF RURAL HOUSEHOLD : JUNE 30, 1971

State	Number of Villages Surveyed*	Top One Per Cent	Top 5 Per Cent	Top 10 Per Cent	Top 25 Per Cent	Top 40 Per Cent	Top 50 Per Cent
Andhra Pradesh	1008	15.89	40.70	56.59	78.33	89.61	94.11
Assam	540	9.04	26.50	40.31	65.64	79.83	83.03
Bihar	1280	13.08	37.01	52.25	76.29	87.50	92.72
Gujarat	540	12.01	30.95	47.25	72.80	85.63	91.10
Haryana	300	7.01	29.29	44.60	72.00	87.24	92.43
Himachal Pradesh	96	10.45	24.10	37.20	60.58	75.64	83.11
Jammu and Kashmir	540	7.40	21.33	33.50	55.94	71.35	79.42
Karnataka	540	19.25	38.40	52.83	76.03	87.60	92.73
Kerala	540	13.80	36.42	51.60	75.40	84.82	91.25
Madhya Pradesh	1080	9.80	20.11	43.16	68.45	81.43	88.41
Maharashtra	936	11.30	32.42	48.60	74.00	86.25	92.87
Manipur	192	7.05	22.30	37.01	59.92	74.31	83.39
Meghalaya	96	8.60	25.05	38.40	59.58	77.00	82.59
Orissa	540	12.80	31.52	45.06	68.01	82.50	88.56
Punjab	360	7.60	30.50	50.30	79.05	92.23	95.21
Rajasthan	540	10.32	29.05	42.46	66.35	80.15	85.47
Tamil Nadu	936	15.35	39.90	56.16	79.33	90.72	94.69
Tripura	192	7.98	26.07	41.20	66.61	83.91	88.98
Uttar Pradesh	1584	11.16	31.35	43.98	69.03	82.33	88.31
West Bengal	552	12.20	34.00	49.58	74.85	87.31	92.37
Delhi	36	8.30	30.26	47.90	77.50	89.64	93.71
All-India	12452	14.30	35.27	50.56	74.70	86.61	91.89

Note : \*Number of sample households, by states, has not yet been published by the RBI. However, it has been noted that 12,452 villages were surveyed, with slightly over 8 households, on an average, in each selected village.

to household owning assets worth 5 lakhs and above, whose number in the rural areas will not be less than 25,000. The AIRDIS (1961-62) furnished data on all households owning Rs 20,000 and above in one group (which, incidentally, formed 5 per cent of the rural population owning 37 per cent of total assets).

The AIDIS (1971-72) improved upon it, and we have the richest class

clubbed under the "Rs one lakh and above" group (which comprised one per cent of the rural households owning 14 per cent of total assets). If the policy analysts are interested in a redistribution strategy, the top five per cent of asset-holders need a thorough probe, which data are not processed and presented in adequate detail by the RBI. The subsequent reports of the 1971-72 survey are expected to

keep the requirements of the administrators in view and to furnish more detailed information on the super rich households, rather than just club them into one group. Aggregation involves masking significant information. Any attempt to disaggregate the statistics furnished by the summary results will be based not on evidence, but on some assumptions and speculations on theoretical grounds, which is not



## **NATION REGAINS SPIRIT OF ADVENTURE 1975-76**

# **Drive against Black Money**

- The underworld of smugglers smashed. Top smugglers behind the bars; 42 smugglers declared absconding and their property seized.
- Ceilings clamped on vacant urban land. Transfers within ceilings forbidden.
- Limits on area of dwelling units set. Valuation of luxury houses to nab tax evaders. Direct taxes collection up by 27.4 per cent since July 1975, following tax raids.
- Income and wealth exceeding Rs. 15,870 million disclosed by over 250,000 declarants under Voluntary Disclosure Scheme. Tax revenue Rs. 2,490 million.



TABLE 3 : PROPORTION OF TOTAL ASSETS SHARED BY VARIOUS GROUPS OF RURAL HOUSEHOLDS : JUNE 30, 1962

State	Top 5 Per Cent	Top 10 Per Cent	Top 25 Per Cent	Top 40 Per Cent	Top 50 Per Cent	Gini Co-efficient for the Top 50 Per Cent
Andhra Pradesh	41.5	59.3	81.8	91.1	94.3	0.5436
Assam	27.9	39.3	63.0	79.2	85.0	0.3610
Bihar	36.8	54.5	78.1	85.6	92.6	0.4791
Gujarat	27.5	44.4	70.7	85.1	90.4	0.3969
Jammu and Kashmir	23.7	34.6	58.4	74.2	81.4	0.3144
Kerala	43.7	57.5	81.4	91.2	94.5	0.5347
Madhya Pradesh	30.6	44.9	69.0	82.0	88.0	0.4340
Madras	41.5	56.3	80.0	90.8	94.0	0.4602
Maharashtra	33.7	47.0	74.2	87.2	92.3	0.4315
Mysore	37.5	52.4	73.4	86.0	91.3	0.4652
Orissa	29.3	41.5	65.7	80.6	86.5	0.3818
Punjab	21.2	40.0	72.5	85.8	92.0	0.3593
Rajasthan	25.2	37.8	61.6	76.7	84.1	0.3363
Uttar Pradesh	33.5	45.8	69.5	81.4	88.2	0.4155
West Bengal	33.4	49.4	74.1	86.9	92.0	0.4407
All India	37.0	50.5	74.0	86.2	91.3	0.4566

Note : Total number of households surveyed are not available.

desirable. Reasonable disaggregated estimates can be prepared by the RBI from survey data at their disposal. However, the RBI should furnish the size of the sample at each stage to give an idea of the reliability of the estimates. Here, we have utilised the results of RBI Surveys so far available. This is only a preliminary attempt. A detailed note on the topic will be forthcoming on the basis of additional data expected from the RBI.

AIDIS (1971-72), pertains to 12,452 selected villages, covering on an average some 8 households per village. It covered the entire country, with three independent samples (RBI, Central and states), while the data were collected in two main sub-rounds. A two-stage stratified sampling design, with villages as first-stage units and households as second-stage units, was adopted for the rural areas. The country was first divided into 66 agricultural regions and further into 379 rural strata. The allocation of samples was mainly on the joint consideration of population, area, under cereal crops and also on available investigator strength, with partial modification to ensure a minimum of 180 villages in each state, except in some smaller states and Union Territories. The unit of selection was the 1961 census village. The asset values recorded were in gross terms, and inventories were not included. The tabulated data on asset ownership were by eleven broad classes, ranging between "less than Rs 500", to "Rs one lakh and above". The results furnished data separately for four occupational groups:

cultivators, agricultural labourers, artisans and other non-cultivators. However, for our preliminary note, only the basic tables relating to all households have been utilised.

AIRDIS (1961-62) results have been widely used by researchers for wealth distribution studies. V V Divatia, has recently prepared an important document on "Inequalities of Asset Distribution of Rural Households", presented in the International Association for Research in Income and Wealth, on the basis of the 1971-72 Survey result of the RBI. The focus of this paper has been on the all-India and state-wise distribution of assets and inequalities in asset holding, without any special regard to the study of the richer asset-holders, within the distribution. This interesting paper has estimated a series of inequality measures: T-index, Kuznet's index, Gini co-efficient, V-value, etc, for the different states, as also the T and K indices for "between states" inequality. States have been arranged according to the descending order of inequality for each measure, and an overall ranking has been attempted on the basis of measures T, K and Gini-coefficient. The states have been put into five groups according to their respective overall measures of inequality. Further, states have been grouped into four broad classes of average asset holdings (ranging from Rs 31,833 in Punjab to Rs 6,018 in Meghalaya); and these four groups, together with the five groups of varying ranges of inequalities have then been matched to form a two-way classification of

states, which very pertinently failed to show any association between level of asset value and degree of inequality. This has been the first analysis of the AIDIS Summary Results:

However, there has never been any denying the extreme inequality in the distribution of assets in rural India. As on June 30, 1971, about 20 per cent of the rural households in India had either no assets or very nominal assets not worth mentioning. Their share in the overall assets was not even one per cent of the total. More than a third of the households had assets worth less than Rs 2,500 each, and the value of assets held by them was only three per cent of the total. Over 50 per cent of the rural households had assets worth less than Rs 5,000 each, and their share was only 8 per cent of the total. As compared to these, the top 50 per cent had about 92 per cent of the total assets, while the share of top 10 per cent was about 51 per cent, as on June 30, 1971. The relative disparity in the asset holdings between the top 50 per cent and the bottom 50 per cent is reflected in the single fact that, while the former had an average asset holding of Rs 20,900 per household, the lower 50 per cent had assets worth only Rs 1,838 per households—mostly durables such as ornaments, household utensils, furniture, small huts, and a few livestock. Most of these households had no land, or had only a small slice of land. Their share in the total land holdings (in terms) was only 7 per cent of the total.



TABLE 4 : INEQUALITY MEASURES OF DISTRIBUTION OF ASSETS BY STATES : JUNE 30, 1971

State	Average Value of Assets (Rs)			u	v	w	Gini Co-efficients	
	Bottom Half of House holds	Top Half of House holds	All House holds				Top 50 Per Cent	All House holds
Andhra Pradesh	954	15207	8080	0.1181	15.94	1.88	0.5104	0.7019
Assam	2692	12975	7833	0.3437	4.82	1.66	0.4178	0.5701
Bihar	1874	23782	12828	0.1461	12.69	1.85	0.4783	0.6770
Gujarat	2292	23457	12874	0.1780	10.23	1.82	0.4389	0.6505
Haryana	4132	50147	27139	0.1523	12.14	1.85	0.3973	0.6439
Himachal Pradesh	7672	37674	22673	0.3384	4.91	1.66	0.3362	0.5091
Jammu and Kashmir	6302	24219	15260	0.4130	3.84	1.59	0.2985	0.4809
Karnataka	1572	19952	10762	0.1461	12.69	1.85	0.4973	0.6810
Kerala	2046	21185	11615	0.1762	10.35	1.82	0.5045	0.6663
Madhya Pradesh	2442	18598	10520	0.2321	7.62	1.77	0.3721	0.6006
Maharashtra	1706	21659	11682	0.1460	12.70	1.85	0.4262	0.6510
Manipur	2450	12143	7296	0.3358	4.96	1.66	0.3955	0.5070
Meghalaya	2074	9963	6018	0.3446	4.80	1.66	0.3166	0.5133
Orissa	1386	10661	6023	0.2301	7.69	1.77	0.4770	0.6103
Punjab	3068	60599	31833	0.0964	19.75	1.90	0.4588	0.7010
Rajasthan	3700	21808	12754	0.2901	5.89	1.71	0.4062	0.5683
Tamil Nadu	718	12936	6827	0.1052	18.02	1.89	0.5110	0.7201
Tripura	1422	11528	6475	0.2196	8.11	1.78	0.3672	0.5901
Uttar Pradesh	3166	23896	13531	0.2340	7.55	1.77	0.4118	0.6023
West Bengal	1114	13548	7331	0.1520	12.16	1.85	0.4527	0.6661
Delhi	2720	42659	22689	0.1199	15.68	1.88	0.4456	0.6668
All India	1838	20849	11343	0.1620	11.34	1.84	0.4657	0.6611

In the nomenclature of income-distribution studies, this group may be termed "the poor", and can be safely treated as "propertyless", and ignored from any fruitful analysis of accumulation of wealth, in any corner of the world. In popular language, they are the "have-nots", and it would be more meaningful to ignore the tail-end with essentially no assets. They need special investigative analysis — in complete isolation from the "haves". Their absolute "poverty" in regard to asset holding, as compared to that of the rest, makes researchers wonder if any meaningful purpose would be served to club them with the real asset-holders while analysing wealth accumulation in the country. Further, when the combined share of the top 50 per cent of households is 92 per cent of total assets, any growth in wealth would essentially measure the increase in the assets of the richer households, as it would not be affected by any increase or decrease in the assets of the rest owning only 8 per cent of the total.

Special studies are necessary for the two tail ends of assets distribution, because of their significance in our re-distribution policy. We may attempt to study the truncated top 50 per cent of asset-holders and categorise them into middle-class, upper-middle-class and the rich and upper-rich class (i.e.

those having assets above Rs 10 lakhs). However, RBI's Summary Results are wholly inadequate for this sort of categorisation, as the topmost group recorded is those with assets above Rs one lakh. We would attempt to make the best possible use of the existing information, by concentrating on the asset holding and its distribution among the upper half of the rural households. Theoretically there may be a little flaw in this type of bifurcation. But for all practical purpose, the huge sample size of about a lakh households of AIDIS is perfectly suitable for our study of the truncated population.

Policy-makers and planners would gain more by studies relating to the richer section of society. Imposition of tax on assets, removal of subsidies in the form of low interest rates, tax rebates and incentive schemes, subsidised seed, fertiliser, capital equipment and irrigation facilities, now mostly enjoyed by

the richer section of rural households, would help in reducing inequalities. A few groups in the top are expected to bear the burden of taxes and transfers. The sheer number of those who should be at the receiving end and who have nothing in common with the 10 on 25 per cent at the top, would reveal the need to reorient our data collection and processing, to provide a basis of analyses for the determinants of wealth accumulation.

In this section, we will investigate the concentration of assets, and their distribution among the "rich and privileged class" both in terms of total assets as well as land owned by them, ignoring the "poverty group" formed by the bottom 50 per cent of the rural households. Share of land in total of all rural households was 66 per cent on June 30, 1971, while buildings and vacant household sites accounted for a little above 18 per cent, livestock 6.5 per cent, and durable household goods

TABLE A

	Percentage Share of Assets in				
	Land	Building	Durable Goods	Others	Total
top 1 per cent	75	13	3	9	100
top 5 per cent	73	14	4	9	100
top 10 per cent	70	16	4	10	100
top 25 per cent	68	18	4	10	100
top 50 per cent	63	20	5	12	100



TABLE 5 : SHARE OF LAND OWNERSHIP\* BY STATES : JUNE, 30 1971.

State	Top one Per Cent	Top 5 Per Cent	Top 10 Per Cent	Top 25 Per Cent	Top 40 Per Cent	Top 50 Per Cent	Gini Co-efficient for Top 50 Per Cent
Andhra Pradesh	11.86	25.70	50.05	75.65	90.00	96.06	0.4023
Assam	7.90	23.90	37.55	63.60	82.89	90.40	0.3031
Bihar	10.80	31.61	47.41	72.90	87.60	93.64	0.4086
Gujarat	7.20	26.65	43.32	67.00	89.23	95.82	0.3232
Haryana	8.05	28.03	51.71	76.51	91.50	97.74	0.4096
Himachal Pradesh	4.90	20.04	36.12	58.28	74.01	81.49	0.3107
Jammu and Kashmir	3.70	13.91	24.03	46.39	61.73	73.19	0.1724
Karnataka	14.50	34.09	48.09	70.53	85.79	93.10	0.4043
Kerala	11.90	32.11	47.49	72.68	85.37	91.24	0.4311
Madhya Pradesh	8.70	26.49	40.03	65.51	80.90	89.09	0.3380
Maharashtra	8.50	28.20	43.81	71.93	87.71	94.22	0.3701
Manipur	7.00	24.06	32.29	55.34	75.62	88.73	0.2021
Meghalaya	5.40	18.35	30.01	50.31	71.60	80.71	0.2150
Orissa	10.50	29.80	42.99	66.70	82.55	90.33	0.3612
Punjab	12.00	32.50	50.79	85.10	98.50	99.64	0.4827
Rajasthan	3.10	15.33	35.12	58.29	78.20	86.02	0.2611
Tamil Nadu	12.28	35.00	52.10	80.74	94.84	98.90	0.4635
Tripura	7.72	17.81	36.95	61.30	79.15	87.01	0.2938
Uttar Pradesh	7.90	26.67	41.00	67.21	83.30	91.53	0.3529
West Bengal	9.10	30.40	47.50	76.60	91.70	97.00	0.4314
Delhi	8.21	31.84	55.04	88.67	99.00	99.90	0.5143
All India	7.85	26.20	41.80	69.64	88.26	93.01	0.3516

Note : \* in terms of value.

about 5 per cent. The rest consisted of machinery and implements, financial assets, etc. State-wise distribution of assets by items is furnished in Table 1.

The proportion of land and other assets held by the top 50 per cent of households in 1971, were as in Table A.

Statewise data on the productive resources at the control of this exclusive group during 1971, have been shown in Table 2. A comparative picture during 1962 has been presented in Table 3. Table 4 furnishes some inequality measures. The overall concentration ratio of asset accumulation, at the all-India level, for this group, increased nominally from 0.4566 in 1962 to 0.4657 in 1971. But, at the state level, there had been some increase in the inequality (as measured by Gini co-efficients) in Assam, Gujarat, Karnataka, Orissa, Punjab, Rajasthan and Tamil Nadu. Fall in concentration (in asset distribution) has been recorded in Andhra, J and K, MP and Kerala, while it remained almost at the same level in Bihar, Maharashtra, UP and West Bengal, during this period. The share of the "rich privileged" group in the total assets improved slightly, from 91.3 per cent in 1962 to 91.9 per cent in 1971.

Thus there was no reduction either in the share of the top 50 per cent in total assets or in the inequality of its distribution among them. Shares of most sub-groups remained the same except of the top 5 per cent whose owner-

ship of total assets recorded a fall from 37.0 per cent in 1962 to 35.3 per cent in 1971.

However, at the state level, there were fluctuations — though, except in a few states (Orissa, Punjab-Haryana and Rajasthan), the variations in group shares were not very wide. For the top 10 per cent in five states (Andhra Pradesh, Bihar, Kerala, MP and UP) share of asset holdings declined. In five other states, (Gujarat, Maharashtra, Orissa, Punjab and Rajasthan), the share of the top 10 per cent appreciated during the same period. This group incidentally, owned a little above 50 per cent of the total assets, at the all-state level. And it is precisely this group — the super-rich — whose asset holdings in the form of land, buildings, capital and livestock, whose access to public capital goods, whose consumption/utilisation of subsidised infrastructure facilities, need detailed probing. The subsequent results of AIDIS, on the basis of data collected in 1971-72 should cross-classify by demographic and socio-economic characteristics, by total receipts of households, and by receipts from different types of activities. This would identify the reasons and sources of the underlying pattern of concentration.

Eltete and Frigyes have suggested some new inequality measures which are simple to compute and possess con-

venient "decomposability". These mea-

$$\text{sures are : } u = \frac{m_1}{m} ; v = \frac{m_1}{m_2} ;$$

$$w = \frac{m_2}{m} ,$$

where  $m$  is the mean of a given distribution,  $m_1$  is the mean of the lower half of the distribution, and  $m_2$  the mean of the upper half of the distribution. They furnish an idea of inequality experienced by the lower half of the households relative to overall average, the lower half of the households relative to the upper half of the distribution, and the upper half relative to the overall average. These measures, along with the popular Gini co-efficient of inequality measures for the rural households, have been furnished in Table 4.

Wide variations have been noted in the proportionate shares of assets owned by the top one, five, ten and 25 per cent of households in the different states. While asset holdings by the top one per cent of households was above 15 per cent of the total in Andhra, Karnataka, and Tamil Nadu, it ranged between 10 to 15 per cent in Bihar, Gujarat, Himachal, Maharashtra, Orissa, Rajasthan, UP, and West Bengal. For the other states it was below 10 per cent, whereas the all-India average



was 14.3 per cent.

For this top 25 per cent Andhra, Bihar, Karnataka, Kerala, Punjab, Tamil Nadu and Delhi, recorded more than 75 per cent of the total assets; while J and K, Manipur and Meghalaya recorded less than 60 per cent of the total for the same. Finally Punjab recorded more than 95 per cent of the total assets for the "rich" and "privileged", group under study; whereas Tamil Nadu, Delhi, Andhra, West Bengal, Maharashtra, Karnataka, Haryana and Bihar reported shares of between 92 and 95 per cent for that group.

There were wide variations among the states, in the average asset holding per household by the top 50 per cent group. It ranged between more than Rs 60,000 in Punjab and less than Rs 10,000 in Meghalaya. Haryana, Delhi and Himachal also recorded very high aggregate values, respectively, at Rs 50,000, Rs 43,000 and Rs 38,000 per household. Bihar, Gujarat, J and K, Maharashtra, Kerala, Rajasthan, and UP also had average holdings above the national average. On the whole, all the eastern states (except Bihar) and Tamil Nadu in south reported very poor average asset holdings, even for the richer 50 per cent.

From the concentration ratios for 1971, we may say (very broadly) that Andhra, Bihar, Karnataka, Kerala, Orissa and Tamil Nadu had more disproportionate asset distribution than Haryana, J and K, Himachal, MP, Manipur, Meghalaya and Tripura. Delhi, West Bengal, UP, Rajasthan, Punjab, Maharashtra, Gujarat and Assam were around the all-India level of concentration of assets. The u, v and w measures indicate that for all rural households Punjab, Tamil Nadu, Andhra and Delhi recorded very heavy concentration of assets among the top 50 per cent of households, followed by Bihar, Karnataka, Maharashtra and West Bengal; while Assam, Himachal, J and K, Manipur and Meghalaya recorded comparatively lesser inequality in the overall distribution of assets.

However, the available data can only identify the broad dimensions of the relative inequalities, among and within the states. They cannot identify the specific reasons resulting for such wide variations. For example, a very simple explanatory variable could be the average age of the head of the household in the various socio-economic groups and in the different occupational patterns. Ageing the average size of the

assets-owing household and the number of earners per household could explain certain inequalities. Information about inheritance of assets and own acquirement through purchase etc, by the various socio-economic groups would also be of use for studies on distribution.

Land has been the most important asset among rural households in India. As per AIRDIS (1961-62), the aggregate value of assets in the form of land was 62.3 per cent of the total asset holdings, while the same for 1971 (AIDIS) was 66.2 per cent. For the top asset holders, land formed nearly two-thirds of total assets; whereas for the poorest section it was nil or negligible, for both years of survey. Table 1 furnishes data on proportion of land and other asset holdings by rural households at the state level and some related statistics. Bihar, Haryana, Maharashtra, Punjab and Tripura had more than 70 per cent of their assets in land, while HP, J and K, Manipur, Meghalaya, Rajasthan and Delhi had between 52 and 59 per cent of their assets in land.

Table 1 also furnishes statewise statistics on the proportion of landless households, those having less than half-an-acre, and those having more than 30 acres per household. These figures speak for themselves, and bring out the discrepancies in land ownership not only among states, but also within each state. There were wide variations among the states in the proportion of landless and landowners. Among the important states, Maharashtra, Tamil Nadu, Gujarat, West Bengal, Kerala and Karnataka — as also Delhi, Punjab and Haryana — present the most deplorable picture. The percentage of landless and of those with negligible land was 65 in Delhi, 56 in Punjab, 55 in Kerala, 53 in Tamil Nadu, 48 in Haryana, 41 in Andhra and 37 in Gujarat. The top land owners in Rajasthan, Maharashtra, MP, Karnataka, Gujarat and Haryana had the lion's share. Incidentally, as per RBI estimation, there was not a single household in rural West Bengal owning more than 30 acres of land. Compared to this, Rajasthan had 2.3 lakh households with more than 30 acres of land, Maharashtra 2.2 lakh, MP 1.5 lakh, and Karnataka and Gujarat each 1.1 lakh households owning more than 30 acres of land, in 1971. In all, there were 11 lakh households in rural India in the top land-owning group, as estimated

by AIDIS.

Land holdings — in terms of value — indicate acute concentration among the richer section. Table 5 furnishes state-wise data on the share of land ownership of various groups in the top 50 per cent of rural households. The top one per cent of rural households had about 8 per cent of the total land (in value terms), while the top 50 per cent had 93 per cent of the total. The lowest 25 per cent in the entire rural areas had hardly any land; whereas the lion's share was owned by the top 25 per cent. The richest 7.8 lakh households had as much land as that the bottom 405 lakh households. The top 50 per cent households, on an average, owned land worth about Rs 14,000 per household, compared to only Rs 1,050 worth of land owned by the bottom half.

The variations in land ownership of the top 50 per cent of rural households, by states, can be observed from the shares of the different owner-groups and the concentration ratios (see Table 5). The concentration ratio was the highest in Delhi, followed by Punjab, Tamil Nadu, West Bengal and Kerala. All these are small states with very heavy concentration of population for some reason or the other. The middle group consists of Andhra Pradesh, Bihar, Haryana, Maharashtra, Orissa and Karnataka, where the concentration of land ownership was above the all-India average. J and K, Meghalaya and Rajasthan appear to have very little concentration in land holdings among the top 50 per cent group.

We have made an attempt to identify the problems involved in investigating the relative inequalities in asset holdings, among states and within that group of rural households who may be termed as "property owners" in isolation from the group with essentially no material assets. All we have achieved in the process is a description of the pattern observed. Asset shares of various percentile groups and overall inequality measures present only the summary picture of the distribution. The above review of the currently available information thus constitutes only the first stage of our study. The rural asset-holders are disproportionately located in the various regions in the country. We have identified the composition of the potential asset-holding groups. Regional results already available are being studied to locate the biggest asset-holders in smaller regions.



and to study the determinants. But the highly aggregative character of the results furnished for the topmost asset-holding group needs modification. We would expect the Reserve Bank to come forward with detailed tabulated results,

particularly for this group — cross-classified by demographic and socio-economic characteristics, as well as by total "receipts" of the households to enable researchers make full justice to the enormous amount of statistics col-

lected by the AIDIS.

[Views expressed are those of the author and not necessarily of the organisation to which she belongs. This paper was presented in the Tenth General Conference of IARNIW.]

# Surplus Labour in Agriculture

## Some Estimates

Ashok K Mitra

*A large part of unemployment and underemployment in agriculture arises out of the seasonality factor: there are busy periods and lean periods. Any attempt to estimate surplus labour in agriculture without considering the seasonality of employment would give an incorrect picture of the real situation, especially of the amount of surplus labour available to be used for capital formation elsewhere in the economy.*

*Using data for Ferozepur district from the Studies in the Economics of Farm Management for 1967-68 to 1969-70, an attempt is made in this paper to estimate, first, the total surplus labour in agriculture to get an idea of how far agriculture provides employment to those who are fully engaged in it. The author then estimates separately the extent of surplus labour which is removable and the extent of seasonal surplus labour.*

THERE has been a general notion for a long time that the traditional agriculture provides employment to many more persons than is necessary to produce a given level of output. This notion was very strong during the fifties and sixties, particularly in India, and it was regarded as an almost established fact that the agricultural sector of a developing country like India suffers from large-scale disguised unemployment or underemployment.<sup>1</sup> A large number of studies were then conducted on the concept and measurement of the surplus labour arising out of the underemployment in Indian agriculture; it was felt, very strongly, that the resulting surplus labour could be considered as assets and utilised for capital formation in the economy.<sup>2</sup>

However, the initial over-reaction — if one may call it that — died down soon enough, on the realisation that the concept of surplus labour itself is a very complicated one in the context of traditional agriculture than was realised hitherto and that it does not lend itself so easily to any quantifiable measure.<sup>3</sup> The recent trend of thinking among a large number of the economists, therefore, is that the surplus is illusory; and more so with improved agriculture that is efficient enough to make full use of the total supply of labour in agriculture.

The fact of the matter is that there might be some numbers of surplus la-

bour in agriculture, as the general experience suggests, but then one has to be very careful in dealing with this concept, especially when one makes attempts at empirical verification of the fact. 'Surplus labour' is not really surplus unless it is such as could be mobilised for development needs. For instance, it is not proper to compute surplus labour by assuming 365 days available per worker, because in reality a worker is not available for farm work for all the days in a year. Similarly, one has to take into account the labour days spent in different activities in agriculture: farm work force does not confine itself to crop production, and so any attempt to compute surplus by considering labour spent in crop production only would lead to an upward bias of surplus. At the least, one more important activity to be considered is, tending of cattle; considerable amount of labour is utilised for this purpose. Likewise an estimate of surplus labour of the farm family workers engaged in self-cultivation should also consider the number of labour days hired out, beside considering days spent in crop production and related activities. For, the surplus estimated otherwise would again have an upward bias in as much as a number of surplus labourers thus computed might in fact be hiring themselves out and hence are not unemployed.

A large part of unemployment and

underemployment in agriculture arises out of the seasonality factor. Because of the nature of crops grown, and the seasonality of operations involved in them, there are busy and lean periods in agriculture. Any attempt to estimate surplus without considering the seasonality of employment would again give an incorrect picture of the real situation. The surplus estimated, thus, would not be free from the seasonality factor and any idea of removing the surplus from any farm work would affect the peak-period labour requirement.

### PRESENT STUDY AND DATA USED

Having discussed the issues involved in the concept and measurement of surplus labour, which are often overlooked, we make an attempt in what follows to measure surplus labour in agriculture, if any. We distinguish clearly between two types of unemployment or underemployment — and, hence, surplus: one, the removable surplus labour, i.e., the surplus labour which could be withdrawn from any farm activity without affecting the peak-period labour requirement and the total output; and the other, the seasonal surplus, i.e., the surplus arising out of no work or very little work during the lean season but not removable because of the peak period requirements. The problems under each of these two types of surplus, require different treatments. In one case, sur-



plus labour is to be provided with works programmes, which are of continuous and dependable nature; in the other case, some additional employment is to be provided, which might take care of the seasonal surplus.

In this study, we have thus estimated the total surplus labour to begin with, in order to know how far agriculture provides employment to those who are fully engaged in it. We have then estimated the extent of surplus labour which is removable and the extent of seasonal surplus labour. The present study is confined to the Ferozepur district, and the data used in the study are from Studies in the Economics of Farm Management, in Ferozepur, for 1967-68 to 1969-70.<sup>4</sup>

#### DIRECT ESTIMATION OF SURPLUS LABOUR

Before making any empirical verification, we explain in the following what we mean by the term 'surplus labour'. Surplus labour is the difference between the quantity of labour that would flow from a working force when fully employed and the quantity of labour that is actually put in by that working force.

Thus  $\text{Surplus Labour} = L^1(W) - L$ , where

$L^1$  = Quantity of labour flowing from a worker when fully employed

$W$  = Working force, and

$L$  = Quantity of labour actually put in by the working force.

This surplus would be a measure of surplus labour, in terms of *number of days* and not in terms of *number of workers*. Besides, this surplus would be subject to seasonal fluctuations. We have estimated the surplus labour, as defined above, for the district as a whole. The procedure followed for computing the working force ( $W$ ), the quantity of labour flowing from the working force when fully employed ( $L^1W$ ), and the quantity of labour actually put in ( $L$ ) for the district as a whole, is as follows.

The census gives the working force fully engaged in agriculture in 1961 and 1971. We have calculated the annual rate of growth of agricultural workers in Ferozepur district between 1961 and 1971 and, using these rates of growth, we have estimated the number of agricultural workers in that district during 1967, 1968, and 1969. Assuming that each worker would work for 300 days in a year when fully employed (8 hours of work per day), we

TABLE 1 : DIRECT ESTIMATION OF SURPLUS LABOUR IN THE DISTRICT AS A WHOLE

Steps	Year		
	1967-68	1968-69	1969-70
(1) Quantity of labour flowing from the working force when fully employed ( $L^1W$ )	121647000	123360000	125082000
(2) Quantity of work actually put in by the working force ( $L$ ) in crop production	66469037	68242752	72664093
(3) The surplus labour $S = (L^1W - L)$	55177963	55117248	52417907
Percentage	45.36	44.68	41.91
(4) Quantity of work put in by the working force (cultivators) in the maintenance of cattle	22624560	24084765	25798878
(5) The surplus labour $= 1 - (2 + 4)$	23076403	23142483	20397029
Percentage	20.57	20.04	17.16

estimate the quantity of labour coming from the working force when fully employed ( $L^1$ ). The season and crop report gives the area, both irrigated and unirrigated, under different crops in the district. Labour days per acre both irrigated and unirrigated, utilised for different crops, are available from the farm management report of that district. Using these two sets of information, we estimated the quantity of labour actually used in the district for crop production. Thus the total quantity of labour actually used is estimated ( $L$ ), and by subtracting  $L$  from  $L^1W$  we get the estimate of surplus labour. The result is given in Table 1.

It is observed that the extent of no work days is around 40 per cent of the available labour days of agricultural workers. In other words, if only crop production is considered, agriculture provides employment for only 60 per cent of the available days to the persons fully engaged in it. From this observation, it could perhaps be surmised that, even with the introduction of high-yielding varieties and accompanying improved method of cultivation, the situation in agriculture for providing employment to the persons fully engaged in it has not improved much. However, as mentioned earlier, cattle maintenance is another important activity, on which a large number of days are spent by farmers. We have, therefore, made another estimation of unemployment, by considering the number of days spent in maintenance of cattle also.

Farm management studies give the proportion of days for which a farm worker is engaged in the maintenance of cattle, but we do not know how many agricultural workers have cattle in the district as a whole. Between the two categories of agricultural work-

ers — i.e., cultivators and agricultural labourers — given in the Census, it is perhaps safe to assume that the cattle are with the former category of agricultural worker. Thus, by assigning the proportion of labour days spent in the maintenance of cattle — as obtained from the farm management studies — to the number of days available with the cultivators, we get the number of labour days utilised in that activity. We then deduct the number of days engaged in the two activities, viz, crop production and maintenance of cattle from the total number of days available with the agricultural workers to arrive at the surplus labour days. The result is given in the last row of Table 1. The second estimate suggest that, if we consider labour days spent in the maintenance of cattle in our computation, the surplus labour days get reduced to somewhere around 20 per cent; in fact, in 1969-70, the proportion of surplus labour days is as low as 17 per cent.

One might argue that, since we have considered only the male workers, and that too adults, the work of cattle maintenance need not enter into our computation because the female members and the other non-adult members perhaps can take care of this activity. If this were the case then the surplus labour days estimated would be as presented in Table 1 excluding the last two rows. In any case, since it is a debatable point, we give two estimates of surplus labour days in the Table. As explained earlier, the surplus labour estimated above is not the real surplus in terms of removability; it is subject to seasonal fluctuation. In other words, in this surplus labour is mixed with the seasonal surplus or seasonally unemployed labour. In order to know the removable surplus labour we have to eliminate the seasonality factor and the



TABLE 2 : ESTIMATE OF SURPLUS LABOURERS BY FARM-SIZE

Steps in Estimating Surplus Labourers	Farm-Size Groups (Acres)											
	1968-69						1969-70					
	0-15	15-22	22-35	35-59	59 and Above	All Sizes	0-15	15-22	22-35	35-59	59 and Above	All Sizes
(1) Peak period quantity of labour in days per acre ( $L_{max}$ )	17.63	17.93	22.34	21.08	12.49	19.51	16.02	16.82	19.40	19.95	13.38	18.60
(2) Total peak period work load = ( $L_{max} \times W \times m$ )	1110.69	953.88	2037.41	2082.70	384.69	6438.30	925.96	1086.57	1082.52	1550.12	449.57	5301.00
(3) Number of workers that can put in the total quantum of work during peak period when fully employed = ( $\frac{L_{max} \times W \times m}{25}$ ) = $W_o$	44.43	38.16	81.50	83.31	15.39	257.53	37.04	43.46	43.30	62.00	17.98	212.04
(4) Surplus = ( $Wxm - W_o$ )	19.00	15.00	10.00	15.00	15.00	72.00	21.00	21.00	12.00	16.00	16.00	73.00
(5) Percentage of surplus to ( $W \times m$ )	30.16	28.30	10.64	15.68	50.03	21.96	36.33	32.51	21.50	20.59	47.62	25.61

TABLE 3 : ESTIMATE OF SEASONAL SURPLUS LABOUR BY FARM-SIZE

Steps in Estimating Seasonal Surplus Labour	Farm Size Groups (Acres)											
	1968-69						1969-70					
	0-15	15-22	22-35	35-59	59 and Above	All Sizes	0-15	15-22	22-35	35-59	59 and Above	All Sizes
(1) Average number of labour days per worker during the busy month ( $L_{max}$ )	17.63	17.93	22.34	21.08	12.49	19.51	16.02	16.82	19.40	19.95	13.38	18.60
(2) $L_{max} \times 12 = (\sum L_{max})$	211.56	215.16	268.08	252.96	149.88	234.12	192.24	201.84	232.80	239.40	160.56	223.20
(3) Sum of the labour days per worker in each of the 12 months ( $\sum L_i$ )	134.05	136.34	169.87	160.27	94.95	148.33	131.68	138.64	158.70	174.85	117.28	149.86
(4) Seasonal surplus $S = \sum (L_{max} - L_i)$	77.51	78.82	98.21	92.69	54.93	85.79	0.56	63.20	74.10	64.55	43.28	73.37



convert the remaining surplus labour days into number of surplus labourers. Since it is not possible to get any information about the seasonal distribution of labour days of agricultural workers, for the district as a whole, we come back to the farm management studies and attempt to estimate the surplus labour for each size-group and for the average farm of all the size-groups.

#### ESTIMATION OF SURPLUS LABOURER

Here, again, since data on the seasonal distribution of labour days are available only for the farm family workers, we confine ourselves to estimating the surplus labourers in the category of farm family workers only. We take the peak month workload per worker as the quantity of labour that cannot be dispensed with throughout the year, without bringing about any major organisational changes and decrease in total output. Total peak period workload, in each size-group, is estimated by multiplying the peak month workload per worker by the number of workers in each farm and further by the number of farms in each size-group. The number of workers that can put in the total quantum of work during the peak month in each size-group is computed by dividing the estimated peak month workload in each size-group by 25. This is done under the assumption that a worker, when fully employed (8 hours a day), would work on an average for 25 days a month. The number of surplus labour is then estimated, by subtracting from the total number of workers under each size-group the estimated number of workers required during the peak month. Evidently, the surplus thus estimated would be free from the seasonality factor.

Thus, surplus labour,  $S = (W_m - W_o)$

and  $W_o = \frac{L_{\max} \times W \times m}{25}$ , where

$L_{\max}$  = Peak period quantity of labour per workers

$W$  = Number of farm workers per farm

$m$  = Number of farms in each size group.

The result of our estimate is given in Table 2. Before concluding anything from the result, it is necessary to mention that the 1967-68 data on average annual labour days per farm worker and its distribution do not seem to be in tune with those for 1968-69 and 1969-70. It is quite likely that 'family

farm worker' in 1967-68 also included permanent farm servants as a result of which the labour days put in per worker turned out larger — since permanent farm servants generally work more on the field than do family workers. Since our entire estimation of surplus labourers is based on the labour days put in per family farm worker, the estimate of surplus in 1967-68 presents a very different picture compared to 1968-69 and 1969-70. We shall, therefore, confine our discussion to 1968-69 and 1969-70. Contrary to expectation surplus labourers are found to be the highest in the largest size group. The only explanation there could be of this phenomenon is that the farmers in the highest size-groups are very big farmers, and they themselves do not participate very much in the physical work on the farms though they are counted as farm workers. Evidently, they appear to be surplus labourers, though their not working is perhaps voluntary and they cannot therefore be considered to be unemployed and surplus.

Thus, if we rule out the largest size-group, we see that the surplus labourers decrease with the increase in farm size, confirming the general observation that family farm workers on smaller farms suffer more from unemployment and underemployment. It would not be out of place to mention here that the district chosen for this study, Ferozepur, is noted to have used the high-yielding varieties of crop and other improved agricultural practices; yet even so, the surplus labour from agriculture has not disappeared. Therefore, the view that surplus labour in Indian agriculture is illusory and that improved agricultural practices can be efficient enough to make full use of the total supply of labour in agriculture does not hold good.

Now, as mentioned earlier, we are aware that crop-production is not the only activity; and any net of crop production days out of the available days should not be the only consideration for estimating surplus labourers. Perhaps the surplus would disappear if we consider the labour days utilised on maintenance of cattle in each size-group. But our argument, in not considering the days spent in maintenance of cattle and estimating the surplus thus, is that we have considered only the male adult worker of the farm family who are full-time engaged in self-cultivation. Therefore, the work of cattle maintenance,

which is a regular work of 3 to 4 hours a day, can perhaps be performed by the female and other non-adult members of the farm family who are partially engaged in the activity on their own farms.

The other activity of the farm worker that is to be looked into, is the hiring out of labour. The estimate of surplus labourers, without considering the labour days hired out, would give an incorrect idea of the removable surplus. We have checked with the farm management studies; the labour days hired out by the farm family workers in different farm-sizes is negligible, even on the smaller sizes of farm. The average size of holding, even in the smallest size-group (0 to 15 acres), suggests that the sample holdings selected in the farm management studies do not cover those small land holders who usually hire themselves out besides working on their own farms.

It might be mentioned in this context that Ashok Rudra, in a recent study on the estimation of surplus labour, apparently overlooked these factors.<sup>5</sup> Rudra estimated the surplus labourers in farms of different sizes in West Bengal; his estimates suggests that there is surplus labour to the extent of 27 per cent of the adult members of the farm family. But he does not seem to have taken note of the labour days spent in the maintenance of cattle, and his entire estimate of surplus labour is based on the peak period labour days engaged in crop production only. Perhaps the underlying assumption is that the work of looking after cattle can be as well done by the other members in the family. Similarly, the labour days hired out for agricultural work is also not taken into account, though Rudra mentions that he excludes members of the family who have whole-time and part-time non-agricultural occupation. It is quite likely that the full-time farm family workers, especially from farm sizes 0 to 2.5 acres, hire themselves out for some days for agricultural wage employment; and to that extent the surplus gets reduced.

#### ESTIMATE OF SEASONAL SURPLUS

Having estimated the number of surplus labourers in agriculture, we now attempt to make an estimate of the seasonal surplus labour — or, the unemployed labour days arising out of the nature of crop grown. The unemployed labour days arising out of the sea-



sonal nature of crops grown cannot be considered as surplus labour days in terms of removability, because although during the lean months the available days are unemployed during busy months they are fully employed and hence indispensable. We subtract the labour days put in every month from the labour days put in during the busy month, and sum up the differences to arrive at the seasonal surplus.

Thus seasonal surplus labour

$$S = \frac{\sum (L_{\max} - L_i)}{\sum L_{\max}}$$

$$\text{or } = 1 - \frac{\sum L_i}{\sum L_{\max}}$$

where,  $\sum L_{\max} = 12 \times L_{\max}$

= Average number of labour days during the busy month multiplied by 12

$\sum L_i$  = Sum of labour days per worker in each of the twelve months

The result of the exercise is presented in Table 3. Before discussing the results, it is necessary to mention that in some of the size-groups the number of labour days put in per worker during the busy month exceeds 25. Therefore, if we compare the labour days put in during the other months with those during the busy month, we are likely to end up with a large number of days seasonally unemployed as if the workers are agreeable to overwork every month as they did during the busy month. So, wherever the number of labour days per worker during the busy month exceeds 25, we take that as 25 days, as we assume that on average 25 days per worker per month indicates full employment.

The unemployed due to the seasonal nature of crops grown, do not show much variation between the two years. The magnitude of seasonal unemployment, thus estimated, gives an idea of how uneven is the employment that agriculture provides over the months to the workers engaged in it. The introduction of improved seeds and improved methods of cultivation has evened out the employment over different periods.

#### CONCLUSION

Some estimates of surplus labour are made in this paper, in order to find

out how far agriculture provides employment to persons fully engaged in it, and consequently what is the extent of removable surplus labourers; secondly, in order to examine the extent of seasonal unemployment among those who cannot be removed, because of the peak period labour requirement in crop production.

Assuming 300 days per worker as equivalent to full employment, one can find out the unemployment days and the consequent surplus labour, by comparing the annual average employment per worker with 300 days of full employment. But the surplus arising, thus, would not be surplus in terms of removability without adversely affecting the output and production activity on own farms — because, during the busy period, the requirement of labour days per worker is much higher than suggested by the annual average. Thus a larger part of the labour force engaged in own farming is indispensable even if it suffers from large-scale unemployment during the lean periods. The removable surplus labourers, estimated by comparing the available days of employment with the indispensable days of the workers because of peak period labour requirement, are around 20 per cent of the workers. These could be siphoned off from any farm activity without affecting the peak period labour requirement. So the situation regarding employment to workers fully engaged in crop production has not improved much, even with the introduction of high-yielding varieties of crop. Thus the recent attack on the existence of surplus labourers in agriculture, particularly after the introduction of high-yielding varieties in states such as Punjab, and the view that the surplus is illusory and that improved agriculture is efficient enough to make full use of the total supply of labour, do not seem to hold good.

A large part of unemployment in agriculture, however, arises from the seasonal nature of operation in agriculture. There are periods of heavy and light work. During the period of heavy work, most workers engaged in agriculture have to be on the field and cannot be dispensed with even though during lean months many of them have no work.

Estimates of removable surplus and seasonal surplus are pre-requisites for the planning and launching of any rural works programme, viewed in recent years as employment guarantee schemes. For, the type of rural works program-

mes to be initiated would depend upon whether the work is to be provided to the seasonally unemployed labourers in agriculture or to the removable surplus labour from agriculture. In the case of the latter, the aim should be to provide full-time employment throughout the year on a continuous and dependable basis.<sup>6</sup> The idea is to make these workers feel secure with full-time continuous employment, so that they do not have to fall back on agriculture as is otherwise the case. On the other hand, in the case of seasonally unemployed labourers, the additional work should be of a supplementary nature, provided during the lean season, so that it does not clash with their main farming work during the peak season.

#### Notes

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# Health Care Delivery System

## A Comment

Roger Jefferey

I DO not disagree with the main points of P G K Panikar's paper (May 29). I too want to see a health care system which is rural and preventive in its biases, and based on community-level workers using simple techniques. Where I part company with Panikar is over one of the premises which seem to underly his paper and over his implicit proposals for the way forward + his answer to the question, what is to be done?

My differences with Panikar over his premise are to do with the idea of the need for his article. What is, after all, new about the positions taken by the World Bank, the World Health Organisation and UNICEF? As Panikar himself says, the adage 'prevention is better than cure' is an old one: not only in this, but in all the other elements of the 'new' models, leading Indian spokesmen on health policy have preceded these world bodies. Sometimes, it is true, the elements have been stressed separately, but on occasion the model as a whole has been propounded. We can go back to the 1920s and 1930s, if not earlier, and find British medical experts and the Viceroy agreeing with nationalist leaders that stress must be laid on the prevention of those diseases which, as Panikar points out, remain the dominant elements in the pattern of Indian morbidity.<sup>1</sup> Of course, these groups differed over the way in which they intended to implement this policy, but the verbal commitment to the priority of preventive work, and the failure to achieve this, are threads which link the colonial and the post-colonial experience.<sup>2</sup>

The same can be said, with rather more qualifications, of the stress on priority for expanding the supply of paramedical personnel over producing more doctors, in order to take health services to rural areas. These two stresses also imply the third (simple technology), since nurses, midwives and sanitary inspectors in rural areas do not demand intensive cardiac care units, nor does anyone propose to supply them.<sup>3</sup> The model as a whole can be found lurking in the dense prose of the Bhore (1946) and Mudaliar (1961) Committee Reports, even though it was vitiated in these cases by countervailing state-

ments of the need to keep the standards of medical education 'up' to those of the West. More complete, and less flawed, statements of the model can be found both in the report of the National Health Sub-Committee of the National Planning Committee (1940) and, in the 1972 plan for a national health scheme for rural areas.

So what is new about the current situation? Is it only that the world bodies have woken up to the old truths, because there now exist living examples of systems which apply these truths and are successful, or because economists have found ways, however dubious, to quantify the benefits of the alternative models? Surely not. It is not for want of defensible arguments that policies in countries like India have gone wrong. Even the most reactionary Indian Medical Association has accepted this rhetoric.<sup>4</sup> No, the problem has been that of differential implementation, or, in a hackneyed phrase, differential application of 'political will'. As has been pointed out before, India is not a 'soft state' in the way Myrdal described it: some policies have been achieved at the expense of others. More medical colleges, more doctors have been produced than were planned, while schemes for health assistants faltered and the TB and leprosy control programmes have been abysmally feeble, and the malaria eradication programme has failed.<sup>5</sup> What is, or should be, new about the current contributions, is that they stress the overwhelmingly political elements in the success or failure of health schemes. The WHO/UNICEF contribution blurs this issue, in an attempt, no doubt worthy, to gather as much support for the 'new' approaches as possible, but this is, I think, the key issue.<sup>6</sup> To put the differences between Panikar and me as clearly as possible, then, Panikar seems to think that there is still a need to persuade people by rational argument, whereas I see the need to generate the political will to implement an understanding which nearly all the relevant actors profess already to have.

This brings me to my second area of disagreement with Panikar: what is to be done? I intend here to sketch out only some of the elements which need to be aired, partly because my own

ideas are not fully formed and may appear naive, and partly because, as a foreigner, my role must inevitably be very limited.<sup>7</sup> But I would hope to stimulate at least an exchange of ideas on this topic.

I see the problem as follows. The only countries where a desirable model is approximated are those where socialism has been accompanied by a degree of centralised power, on occasion ruthlessly invoked, which has permitted political leaders to ensure that resources are allocated in accordance with political decisions. The present and foreseeable future Indian forms of socialism will not be of that sort. What then can be achieved within the existing constraints? What are those constraints and which of them are amenable to pressure? Should government programmes be written off altogether, on the grounds that the Indian bureaucracy is incapable of generating community support or dedicated leadership of the kinds which, we presume, have made Jamkhed and similar projects successful?<sup>8</sup>

This seems to be Panikar's point of view, and there is certainly something to be said for it. A correspondent writing in this journal ("Medical Services: Window-Dressing", May 8) has already suggested that the claims of the Central government to have a radical plan in this area are hollow, yet the Centre is probably more radical than the states. Pressures to make health a 'concurrent' subject under the Constitution have failed, and the states remain in a position to obstruct policies they do not like. There is in any case a mass of inertia in the system which would hamstring attempts to reform. In the absence of sweeping power to dismiss existing staff and to close down existing institutions, government expenditure at all levels will go in a large measure to keep the existing facilities ticking. Even the additional expenditure provided by the Plan is in a large measure necessary to continue national programmes already set into routine, and in the present situation the major part of this is committed to the desperate attempt to stem the returning flood of malaria. It is also obvious, as you have mentioned, that the pressures which have led to the current imbalances show no sign of abating. Rotary clubs still donate cancer and cardiac wards, not the services of village level workers; the Municipal Corporation of Delhi and the ESIC between them propose to add another 700 hospital beds in a city which already has over 10,000; and medical



colleges continue to turn out, at considerable expense, inappropriate products. The task of changing this system is thus a mammoth one, even before we consider the modes of thought and action, the social origins of policy-makers, and their commitment to professional values which are incompatible with the "new" models.

However, to abandon the government sector is to abandon the mass of the rural population, for voluntary schemes and piecemeal programmes can never cover more than a fraction of the population. The involvement of the state seems to be unavoidable. Where, then, are the weak points in the system? Where can it be attacked? Obviously an appeal to the fate of the rural poor has some effect: the embarrassment of the medical profession at its failure to deliver the goods has stimulated some willingness to accept reform.<sup>9</sup> But the fact is that although academics have suggested that there has been some shift of political power to rural areas, there is no interest group which articulates their demand for better protection and promotion of their health, nobody who can be relied upon to voice indignation when the wrong policies receive further support. Is there any place in the Indian political scene for concerned academics to fulfil this role?

What I am suggesting, then, is a need for 'middle-level' analysis of what is feasible given the long-run goals which are widely understood. Panikar appears to think that motivation of health workers provides a possible path forward: I am doubtful of the prospects of affecting more than a very few doctors, because the pressures on the other side are too strong — medical educators talk every ten years or so about "making the ethos of social and preventive medicine pervade the whole medical curriculum" but there is no noticeable move in this direction.<sup>10</sup> Other ideas could be investigated: for example, one cause of the failure of nutrition, sanitation and water supply schemes may be their control by medical departments. Instead of trying to integrate these schemes under the control of doctors, which almost inevitably leads to a perversion of the basic ideas, should health care provision be put back under the control of general development agencies, as was tried under the Community Development Programme?

A large number of similar questions could be raised, and I for one do not pretend to have many answers. I would like to think that there is some-

thing more than reliance on voluntary agencies which could dispel the feeling that in the sphere of Indian health services, surface changes disguise deeper unchangeability. The moves for reform now being talked about curiously parallel those of the early 1960s — the same schemes for training multi-purpose workers after a two-year course, the same attempts to make prevention dominate the medical college curriculum. They failed then, and I see no reason at the Central level to stop them failing now, but perhaps at lower levels, changes are going forward which will lead to positive gains. But my main point is that it is no longer enough to reiterate rational arguments in favour of general principles, but instead it is necessary to raise and discuss ways of making concrete advances towards the implementation of these goals.

### Notes

- 1 Similar sentiments can be found dotted throughout official statements, but the examples I have chosen come from what might be considered the formative period for policy after Independence: the speech of the Viceroy to the Central Advisory Board for Health, 1937; the deliberations of that body; the Presidential address by Sir Nil Ratan Sircar to the All-India Medical Conference, 1928; and the Report of the Sub-Committee on National Health of the National Planning Committee of Congress, 1940.
- 2 A casual glance at the Plan documents on health, and ministerial addresses to the Central Council of Health, is enough to bear this out.
- 3 Whereas doctors' demands forever escalate; see for example a speech by Dr H. Vaishnava to the Association of Physicians of India, reprinted in the *JIMA* (March 1, 1976): "Many talk of prestigious coronary care units. One may agree, we must have them, but what about the intensive dehydration and hyperpyrexia care units?"
- 4 I do not, of course, think that the hostility of the medical profession to changes in the location of power which would be necessary to implement anything approaching the Chinese solution is thereby weakened.
- 5 The ex-TB Adviser to the Government has recently launched a serious indictment of the achievements in that field; see *The Hindustan Times* (June 6, 1976).
- 6 For reasons which will become clear later, it seems to me to be inconsistent to place side by side as equivalent paths forward, the nation-wide government schemes of China and Cuba with the voluntary, local approach of Jamkhed, which is at such complete variance with the governmental model in India.
- 7 I am well aware of the objections which could be raised to my saying anything in this sphere, but I hope my contribution will be assessed on its merits and not by the nationality of its author.
- 8 I say, "we presume", because we lack detailed investigations by disinterested observers of the cost-effectiveness of these experiments and the key elements in their success. A recent British proposal to provide just this has recently been turned down by the Central government. Are there Indian proposals to do the same work?
- 9 Again this willingness may be only skin-deep, prompted by the fear of more radical solutions being sought if the doctors continue to appear intransigent. But there is the possibility for exploiting these moves.
- 10 NIHAIE held a conference in 1965 which covered the same ground as one held by them (though with a more powerful group of people) in April 1976.

### Goa Capacitors

GOA's Chief Minister, Shashikala Kakodkar, recently inaugurated Goa Capacitors' Rs 15-lakh plant at the Corlim Industrial Estate. Capacitors provide the reactive power essential for motors, transformers and other inductive loads. The power factor is consequently improved, resulting in enhanced efficiency of electrical mains and therefore longer life of electrical equipment. Goa Capacitors will thus fulfil a vital need in the country's programme to harness and utilise power to the greatest extent possible. At present Goa has no specific sources to generate power and has to depend on

Maharashtra and Karnataka. As these states are not in a position to supply additional power, Goa must exploit every possibility of utilising its present power supply to the maximum extent. Capacitors are an answer to this problem. The Maharashtra State Finance Corporation gave a loan of Rs 7 lakhs to the project which was supported by the Economic Development Corporation of Goa. KDC gave 75 per cent of the subsidy based on the Project Report. Goa Capacitors will produce 10,000 capacitors worth Rs 35 lakhs every year and provide employment to 30 people.



## Industrial Capacity and Production—III

Name of Industry	Accounting Unit	1974			1975		
		No of Units	Installed Capacity	Annual Production	No of Units	Installed Capacity	Estimated (Annual Production)
TIMBER PRODUCTS							
Plywood	M Sq Mts	33	43,344	T 3.6 C 32.0	33	46.788	3.85 27.45
Particle Board	Tonnes	8	44,900	35.6 8,735	8	44,900	6,450
Fibre Board	—do—	3	40,500	HB 21474 IB 1113	3	40,500	18,000 2,200
Safety Matches	Mn Boxes (of 50 sticks)	5	3950.208	22587 4,367	5	3950.208	4,000
RUBBER GOODS INDUSTRY							
Automobile Tyres	Lakh Nos	10	62.81	53.95	13	66.25	60.00
Automobile Tubes	—do—	10	59.91	47.11	13		47.60
Bicycle Tyres	Mn Nos	20	32.39	25.96	20	32.39	26.50
Bicycle Tubes	—do—	20	32.50	19.38	20	32.50	19.65
Conveyor Belts	Tonnes	5	4,810	3,974	5	4,810	4,715
Fan and V Belts	Lakh Nos	9	74.21	67.96	9	74.21	68.65
Reclaim Rubber	Tonnes	6	16,820	16,693	8	2,420	17,000
Hoses	Mn Mts	9	6.85	4.98	9	6.85	5.06
Synthetic Rubber Cots	Lakh Mts	7	7.44	3.18	7	7.44	4.37
Synthetic Rubber Aprons	—do—	7	7.09	4.07	7	7.09	5.22
LEATHER AND LEATHER GOODS							
Vegetable Tanning Hides	Cow Hides	10	22,11,992	8,72,172	10	22,11,992	12,04,452
Chrome Tanning of Hides	—do—	12	24,86,000	18,81,018	12	24,86,000	15,60,012
Western Type of Leather Footwear	Pairs	8	1,38,47,000	69,44,408	7	1,35,62,000	87,92,297
Indian Type of Leather Footwear	—do—	6	94,67,000	69,54,525	6	94,67,000	65,00,000
Packing Bands	Kgs	4	5,01,360	96,425	4	5,01,360	95,152
Leather Belting	—do—	4	2,10,000	64,603	4	2,10,000	73,421
Glue	Tonnes	2	2,820	2355.38	3	3,320	1,403
Myrobalan Extract	—do—	2	7,704	1423.83	2	7,704	846
Cotton and Hair Belting	—do—	2	26	20.68	2	216	29
CEMENT							
Cement	Mn Tonnes	51	19.86	14.32	54	21.161	16.00
AC Sheets and Accessories	Tonnes	11	6,37,000	3,63,268	11	6,37,000	3,70,000
Asbestos Cement Pressure Pipes	—do—			60,122			67,596
Asbestos Textiles Products (packing yarn and mattresses)	—do—	3	2,032	1,822	4	2,532	2,500
Asbestos Jointings and Limpet Sheets	—do—	5	4,350	3,330	5	4,350	3,200
Asbestos Mill Board	—do—	1	500	625	1	500	487
Ferrobestos Sheets	—do—	1	100	45	1	100	44
Profax/Fabrax	—do—	1	2,000	506	1	2,000	575
GLASS							
Bottles and Vials (including semi automatic)	Tonnes	26	2,81,000	2,02,786	28	3,03,634	2,18,000
Sheet Glass	Mn sq m	6	22.00	14.7	6	22.00	16.00
Glass Shells	M Pcs	7	170	142.5	7	170	143.00
Vacuum Flasks	—do—	3	4.5	5.7	3	4.5	6.0
Laboratory Glasswares	Tonnes	1	7,200	2,071	1	7,200	1,800

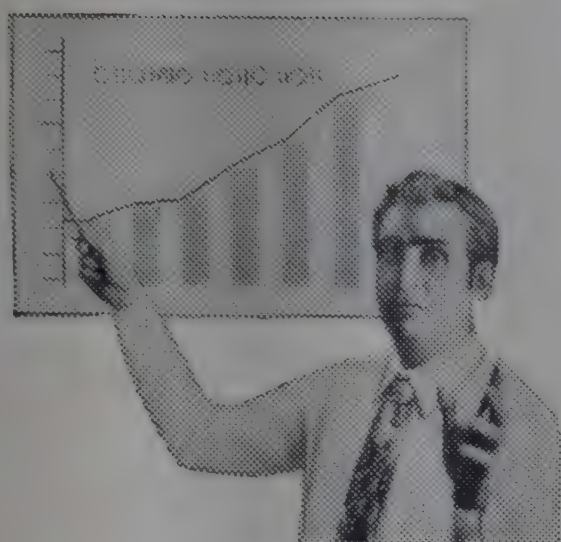
Source: Ministry of Industry and Civil Supplies, Annual Report, 1975-76.



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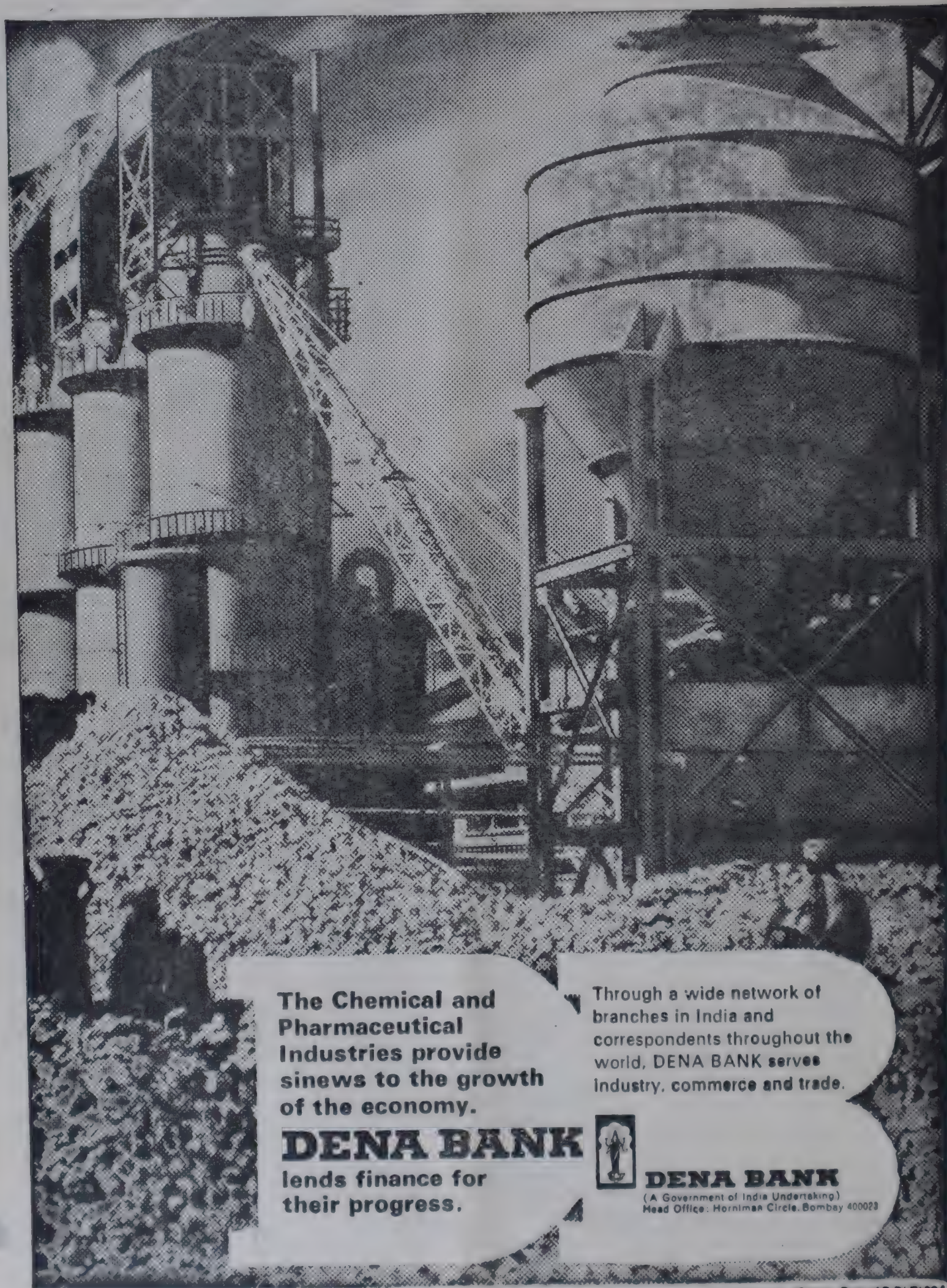
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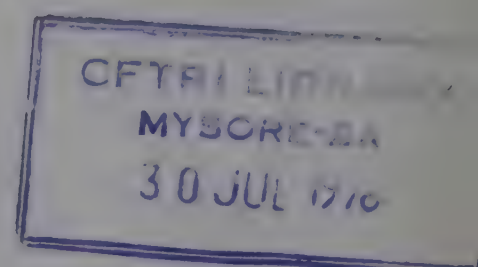
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# ECONOMIC AND POLITICAL

# WEEKLY

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# Ashes of Licensing

THE "Guidelines for Industries" published annually by the Department of Industrial Development of the Union Ministry of Industry and Civil Supplies makes possible evaluation of the industrial licensing mechanism as it has now come to be operated. The latest "Guidelines", for 1976-77, brings out the extent to which distortions in the industrial structure have got accentuated in the last five or six years. An example which stands out is the various categories of metallurgical industries which have expanded under the government's liberalised licensing policy. Substantial investment has gone into these industries, additional capacity far beyond what is required has been created, and now the bulk of this capacity remains unutilised. To quote from the "Guidelines" on the re-rolling industry, for instance: "In its report submitted in July 1966, the Technical Committee had assessed the capacity of billet re-rollers at 27.6 lakh tonnes, of scrap re-rollers at 7.3 lakh tonnes and of other (unassisted) units at 12 lakh tonnes on double-shift basis (total 46.9 lakh tonnes). This capacity has further gone up as a result of modernisation and improvements effected by the existing units as well as the capacity created under the provisions of liberalised industrial licensing policy. New units have also come up both in the small-scale and medium sectors, although they were not encouraged. Similarly, several small-scale units have crossed into the medium sector by virtue of their investment in plant and equipment having exceeded the small-scale limit. Some of the integrated steel plants also make bars, rods, structurals, sections, which are the main products of the re-rollers." As a result, the industry is faced with inadequate availability of raw materials such as billets and scrap and of power. Even more important, "the main difficulty of the industry is with regard to marketing of its products. As against the estimated demand of about 30 lakh tonnes of bars, rods, etc, in 1978-79, the total capacity already available is nearly double this figure. Recent studies show that the demand may even be less".

The same is roughly the situation in the electric furnace, alloy and special steels, cold rolled strips, wire-drawing, steel castings, steel forgings, steel structural fabrication and other industries. The problem of lack of demand in relation to the installed capacity in these industries, consequent upon the virtual Plan holiday beginning from 1965-66, has been common knowledge. And yet the government has liberalised licensing, as a result of which the distortions in industrial investment and capacity creation have got accentuated. Even in such an industry as steel structural fabrication, where capacity utilisation has been less than one-third, the "Guidelines" observes that "there are at present 119 units in production with a total licensed/registered capacity of 452,000 tonnes per annum ... In addition, a number of schemes have been registered under the liberalised licensing policy". In the case of the electric furnace industry the "Guidelines" says that out of 202 units, about 100 have gone into production, "but generally the capacity utilisation appears to be as low as 30 per cent, while some [of the units] are reported to have been closed down also". The situation will further worsen as a result of the recent diversification allowed to some steel casting units to manufacture steel ingots (though electric furnace units have also been permitted to diversify into steel castings). Besides, while "full utilisation of capacity of the electric furnaces units already licensed is not likely to be achieved in the near future", government decided to license a few units on a selective basis for production of steel by the side-blown convertor process developed by the National Metallurgical Laboratory, Jamshedpur.

Diversification in certain situations may be unavoidable; but indiscriminate licensing has created intractable problems for the entire ferrous metals group of industries (other than basic iron and steel) for years to come. Industrialists have set up units in these industries without serious concern for their viability, largely because the bulk of the funds have come from the public sector financial institutions. Now the government together with these financial institutions is faced with the problem of a growing number of 'sick' units.

The policy of indiscriminate licensing adopted for the ferrous metals industries some years ago is now sought to be extended to virtually the entire industrial sector. The now-famous notification of February 1973 on industrial licensing policy had exempted from licensing regulations all proposals involving investment in fixed assets not exceeding Rs 1 crore, subject to certain conditions. Earlier, in October 1966, industrial units had been allowed to expand output by 25 per cent over the authorised licensed capacity. In 1972 the government introduced a scheme for "fuller utilisation of installed capacity which, among other things, provided for endorsement of licences issued



on single or double shift basis so as to allow for maximum utilisation". The government has now further admitted that "in the case of a number of undertakings, during the course of expansion and diversification, capacities earlier expressed on single or double shift basis have also been rationalised on the basis of maximum utilisation". All this amounted to, quite simply, regularisation of unauthorised capacity built by a large number of industrial undertakings in as many as 65 industries. The same principle of endorsement of industrial capacities on the basis of maximum utilisation of installed capacity was again reiterated in January 1975 so as to further regularise unauthorised capacity. The distinction between licensed and registered units has also been removed. The government's contention that, while examining requests for such endorsement, it takes into account the relative priority of the industry, the availability of imported and scarce indigenous raw materials, etc, has to be taken with a pinch of salt.

In August 1975, the government agreed to recognise additional capacities created supposedly as a result of replacement and modernisation of equipment, subject to the usual conditions about not permitting encroachment into products reserved for the small-scale sector and not allowing any foreign exchange outgo. In the same month, the government also permitted automatic expansion of capacity in 15 engineering industries at the rate of 5 per cent per year, upto a limit of 25 per cent in a Plan period. Both of these facilities are over and above the normal permissible limit of 25 per cent expansion over the authorised/licensed capacity. In October 1975 the government decided in pursuance of the 20-point programme, to exempt from licensing requirements proposals from medium entrepreneurs to set up industrial capacities in 21 industries based on indigenous equipment and local raw materials, and also to permit medium entrepreneurs in 29 industries to utilise installed capacities in excess of licensed capacities without limit. While the total exemption is not applicable to MRTP cases or foreign companies, the latter facility is available to such undertakings also, subject only to the condition that the excess production is exported or sold in accordance with the directions of the government. However, exports depend on external demand and industrial units can always plead their inability to export if the conditions are not to their advantage. And for the government to attempt to

regulate the day-to-day sales of a wide range of industrial products such as steel castings and forgings, heavy electrical equipment, industrial machinery, automobile ancillaries, machinery tools, etc, would be, to say the least, foolhardy. In March 1976, the government also delicensed industries set up on the basis of technology developed by the national research laboratories, subject to the usual condition that there should be no encroachment into areas reserved for the small-scale sector.

Besides the general relaxations of licensing regulations, diversification facilities have been accorded to a number of individual industries. Industrial machinery and machine tools industries have been allowed to diversify into the each other's spheres. Heavy electrical plants licensed to produce any one type of electrical equipment are allowed to diversify into other heavy electricals. Steel castings and steel ingot industries have been allowed to diversify among themselves. The steel forging industry has been permitted to diversify into other similar products. Passenger car units have been allowed to go into industrial machinery and machine tools. Non-ferrous alloys and semis industries have been allowed to produce related products not produced in the country so far. Cement manufacturers have been permitted to produce cement machinery, even though there is considerable underutilisation of capacity in the cement machinery industry.

What do all these relaxations and liberalisations add upto? Certainly, they are entirely unlikely to result in industrial investment and production conforming to any scheme of priorities or in rapid employment generation as envisaged in the Fifth Plan. The Fifth Plan, it may be recalled with some difficulty, sought to aim at (a) a large employment content in the investment programme; and (b) a production pattern which would move in favour of mass consumption goods so that the redistribution of incomes anticipated in the Plan would be matched by the availability of goods required by the masses. The current industrial licensing policy bears no relationship to these objectives. What is sure to happen instead is greater distortion of the production pattern, necessitating larger and larger subsidies for luxury consumption products. Also, more and more industrial units are likely to fall 'sick' and will have to be salvaged by the government and by the government-owned financial institutions, including commercial banks.

## Terrorism

### The Real Culprits

CONTRARY to popular belief, the practice of hijacking of aircraft in order to obtain political and military advantage did not begin with the hijacking of planes to Cuba after the Cuban revolution, or with the July 1968 hijacking to Algiers of the El Al Boeing, bound for Tel Aviv from Rome, by the Popular Front for the Liberation of Palestine. The distinction of introducing this new tactic in international war belongs properly to France. The first instance of hijacking an aircraft in order to obtain political and military advantage took place in 1956, when the French government — which by no stretch of imagination can be equated with a guerilla group representing a desperate people forcibly dispossessed of their homes for generations — organised the hijacking of the Moroccan government plane which was carrying FLN guerilla leaders of Algeria, including Ahmed Ben Bella.

It is necessary to recall these slightly remote historical facts, for indignation at the acts of "terrorism" practised by the Palestinian guerillas comes easily to a liberal conscience. Any "moral" judgment on the Palestinian actions has to go into what one might call the First Causes in the whole Israel-Palestine tangle. Viewed objectively, the Palestinian actions are responses to aggressive initiatives by Israel at every step starting with the imperialist-supported illegal immigration into Palestine all the way through to the creation of Israel and the later continuous expansion of its territory at the expense of the Arabs.

At every stage in the Zionist aggression in Palestine, the non-Palestinian Arab states have been ready to accept the immediately preceding *fait accompli* and agree to live in peace with the Zionist state. In the words of Maxime Rodinson, the Arabs have always been "one war behind". It took the Palestinian guerillas to update as it were, the traditional Arab way of fighting Zionist aggression. Since the activation of the Palestinian guerilla front, the wars that Israel has had to fight have at least been on-going wars. It is the Palestinian guerillas who have recognised that the real enemy is not the State of Israel, dominated by European Jews, but imperialism itself, which has created this state in their heartland.

Hijacking of civilian planes, and subjecting persons who have nothing to



with the miseries the Palestinians have had to endure for generations, no doubt seems unjustified, and even politically unrewarding. But the Palestinians are in a state of war with Israel; and Israel itself has never flinched from the most ruthless kind of terrorism. One has only to think of the systematic acts of sabotage and terrorism that the Zionist terrorist organisation Irgun pursued as a matter of deliberate policy during the years before the formal creation of Israel. If the Palestinian people are now resorting to desperate measures, the responsibility for that rests with those powers who pushed them to such desperate straits, first by forcibly introducing a large, alien population in their midst, and later, despite every effort on the part of the Palestinians to live in amity with the European Jews in a genuinely multi-national state of Palestine, by forcibly partitioning their country and imposing a condition of homelessness on a majority of them. That condition has persisted for generations, and as long as a people are in desperate circumstances, they will employ desperate measures to rectify them.

## Agricultural Labour

### Crime and Punishment

#### A Correspondent writes:

TWO halis (landless labourers) of Satem village in Bihar district in South Gujarat were murdered and three others injured by landlords and their 'farm guards' on June 10. Farm guards are armed men — often outsiders like Nepalis or Pathans or persons from UP — in the employ of the village landlords to keep the halis under control. The attack on the halis took place when they demanded that they be paid Rs 5.50 per day, the minimum daily wages fixed by the government.

Gujarat is currently under President's rule and within a week of the outrage, on June 16, the Governor ordered a judicial probe. Although the name of the person to conduct the probe was not announced, the scope of the enquiry was announced. The judicial probe, it was stated, would determine "whether the murder of the halis was related to the demand for implementation of minimum wages".

It is now a month since the murder, but the name of the authority to conduct the judicial enquiry has not been announced. More recently, it has been reported that while addressing a meet-

ing at the Raj Bhavan of landlords, 'farmers' and leaders of the INTUC (which now leads a section of halis) the Governor said that "the judicial probe can be dropped if the landlords agree to pay the minimum wages of their own accord". After giving this opportunity to the landlords to effect a change of heart, the Governor added the warning that "if they [the landlords] fail to do so, the law will of course take its own course".

South Gujarat is close enough to Bombay for any serious disturbance in its countryside not to go unnoticed. Soon after the murder of the halis, a Bombay daily commented that the proposed judicial enquiry would yield only the obvious results and that, therefore, the government would do better to concentrate on implementing quickly the minimum wages and such other measures as are possible so as "to ensure that advantage is not taken of the situation by opposition to encourage militant confrontation in the countryside ...".

Those who fear "militant confrontation" will do well to note carefully where the real threat comes from. This correspondent knows of a village in South Gujarat where the landlords have employed on a permanent basis six Nepalis as 'farm guards'. The salary of these men — a total of Rs 18,000 per year — is borne by the landlords. The halis of this village were at the time on strike for implementation of minimum wages. Asked who the leader of the strike was, the halis replied "Nobody, we ourselves are doing it". This village is by no means an isolated instance.

Addressing a gathering of some landless labourers who had gathered to receive pattas, the Governor of Gujarat recently said that it was good that they should organise themselves for securing their demands but that did not mean that they should "take up arms".

Neither the Governor nor the commentator in the Bombay daily has apparently taken into account the institution of 'farm guards'. Surely, these men employed by the landlords at considerable cost are not there for nothing.

## Family Planning

### Dangers of Compulsion

THE Prime Minister has made it clear that it is not the government's intention to enforce compulsory sterilisation. However, the actions of some at least of the state governments have not been in keeping with this assurance.

The UP government, for instance, is reported to have stopped payment of salaries for the month of June to a majority of the 24,000 employees of its medical department as they had allegedly failed to motivate the targeted number of couples for family planning. Addressing a press conference in Lucknow, the medical and health secretary to the UP government is reported to have announced that none of the employees of government-run hospitals and dispensaries, with the exception of surgeons, radiologists, anaesthetists and pathologists, would get their salaries from this month if they failed to motivate at least two target couples in a month.

In Bombay the family planning programme implementation committee decided on July 12 that family planning workers attached to the municipal family planning Centres who fail to "bring in" 50 per cent of the target fixed for sterilisation cases would be suspended. Family planning workers, including medical officers, co-ordinators, women field workers and even store-keepers and clerks, have been given a target of 15 sterilisations every month.

Faced with the threat of not being paid their month's salary or, worse, of being suspended, family planning functionaries can hardly be expected to draw the line at compulsion and use of force in their desperate efforts to fulfil the targets set for them. It also goes without saying that automatically the poor will be the targets of such compulsion and use of force.

The kind of punishment sought to be

## Special Number 1976

The mid-year Special Number of *Economic and Political Weekly* will be published in the third week of August. It will be priced Rs 10, but will be supplied to subscribers at no extra cost.

In view of the Special Number there will be no weekly issues on July 31 and August 7 and 14.



meted out to government employees who fail to fulfil their sterilisation targets is likely also to encourage false claims and cooking up of figures. It may happen as a result that the actual impact on birth rates is considerably less than warranted by the impressive statistics of sterilisations, etc, on paper.

Finally, without detracting from the importance of family planning, it may be said that many other economic and social programmes of the government in such vital areas as, say, land reform, distribution of foodgrains, primary education, provision of drinking water and public health are no less important. Yet it has never been suggested, nor is it being suggested now, that failure to achieve targets in respect of these programmes should be punished with denial of pay or suspension.

## Clippings

New anti-inflationary measures are to be taken soon and the fresh package is expected to include release of foreign exchange for import of raw cotton, synthetic fibres and edible oils and further release of "levy" sugar in the market.

*The Statesman*, July 13

The government is keeping a vigilant eye on the general price situation in the country and working out the necessary contingency plans for corrective action in case of any marked increases during the next few lean months before the kharif crop comes into the market.... The traders are being kept firmly on the leash to ensure that there is no hoarding or profiteering during the next two or three months, while steps are being taken to ensure that the farmers get a reasonable price for their produce.

*The Hindu*, July 13

The price of cotton, which is an important raw material of one of the key industries of the country, has increased over the past five months by 75 per cent to 95 per cent for various varieties of the fibre.

*The Statesman*, July 11

Cloth prices have started rising in the Mulji Jetha cloth market. Following the announcement of the introduction of price stamping from July 15, both traders and spinners have pushed up prices. The rise is estimated around 15 to 20 per cent.

*Financial Express*, July 9

The executive of the Maharashtra Pradesh Rashtriya Koyala Khadan Kamgar Sangh has demanded improvement in the calculation of the consumers price index.

*Indian Express*, July 10

There is a distinct possibility of the Centre reviving the excise rebate scheme for the 1976-77 sugar season slated to commence in October next.

*Financial Express*, July 8

The government has decided to give 10 per cent cash compensatory support

for the export of hessian from June this year to improve its competitive position in the international market... Cash aid at the same rate for jute carpet backing and jute specialities has already been given for one year beginning March 1, 1976.

*Financial Express*, July 9

A technical development fund has been set up by the government to modernise selected industries and to promote their exports. According to an announcement made by the ministry of industry here [New Delhi], priority will be given for this purpose to six selected industries, namely, commercial vehicles, tractors, forgings, foundries, textile machinery and machine tools.

*The Economic Times*, July 11

The Railways have further pruned their wagon procurement programme for the Fifth Plan...

*Financial Express*, July 14

The Nhava-Sheva satellite port project near Bombay may not be taken up during the Fifth Plan period.

*Financial Express*, July 14

The Mining and Allied Machinery Corporation's agreement to manufacture hydraulic steel props for the nationalised coalmining industry in collaboration with Dowty of the UK has been disapproved by Mr Baldev Singh, Chief of the Technological Division of the CSIR, and the DCTD.

*Business Standard*, July 13

Global tenders have been invited by the BEST Undertaking for the supply of 500 bus chassis... This is the first time that the undertaking has invited global tenders for the supply of chassis as stipulated by the World Bank.

*The Times of India*, July 8

With the expiry of the target date for completing the process of implementation of the revised land ceiling laws, the government has been able to distribute only 25.84 per cent of the total area declared surplus. The government had set June 30, 1976 as the target date for completing the process of implementation of the revised ceiling laws.

*Financial Express*, July 11

The land holding pattern in rural West Bengal will continue to seriously hamper the modernisation of agriculture in the state, unless some urgent steps are taken. According to a recent note submitted to the Centre by the state government, rural families holding either no land or up to 3.75 acres are "even now the victims of usurious money lending, rack-renting as well as of distress sales."

*The Economic Times*, July 11

Preliminary socio-economic surveys of gaon panchayats made by the Assam government have brought out the appalling extent to which the villagers are steeped in debt to moneylenders. In one gaon panchayat, for instance, the survey revealed that the total debt of the 3,203 households with 18,739 members was Rs 7,18,871.

*Patriot*, July 11

In a massive campaign against indebtedness, the co-operative department

in Maharashtra freed more than 34,000 people, both in the rural and the urban areas, from the clutches of the money-lenders last year.

*The Times of India*, July 15

Barring Greater Bombay, malaria prevailed in all the districts of the state, Mr K M Patil, health minister, told the Maharashtra assembly in Bombay on Friday.

*The Times of India*, July 10

Malaria is threatening to come back in the whole of northeast India as a major public health problem after a lapse of four decades.

*Amrita Bazar Patrika*, July 8

Family planning workers attached to the municipal family planning Centres [in Bombay] who fail to bring in 50 per cent of the target fixed for sterilisation cases will be suspended. This decision was taken at a meeting of the family planning programme implementation committee, held under the chairmanship of the municipal commissioner, Mr B G Deshmukh, in Bombay on Monday.

*The Times of India*, July 13

The Uttar Pradesh government has stopped payment of June salaries to a majority of the 24,000 employees of the medical department as they have failed to motivate targeted number of couples for family planning, says Samachar.

*Business Standard*, July 10

Each Congress member of the [Delhi] Metropolitan Council will have to register 25 cases for sterilisation by the end of this month, it was decided today at a meeting of the party in the Old Secretariat.

*Hindustan Times*, July 13

The beggars, being rounded up in eight districts under the UP Prohibition of Beggary Act, are proposed to be sterilised. Nearly 650 beggars rounded up in seven districts, including 400 in Faizabad, were sterilised last year.

*Hindustan Times*, July 14

Chief Minister Shankarrao Chavan and Mrs Kusumtai Chavan today offered prayers at the Shri Vithal Temple, Pandharpur on the occasion of the Maha Ekadashi Day. ... Mr and Mrs Chavan declared their Samkalpa (boons sought from God) thus: "Let the defence forces of the country become invincible, let us prosper, let the entire Maharashtra, as a family, be well protected as regards health, long life, victory, blessings, - fearlessness, joy and riches."

*Free Press Journal*, July 9

In Bihar, one can hypothecate the Gandhi Maidan or a railway platform in Patna, to take loan from a bank. The Bihar Co-operative Minister, Mr Mohammed Hussain Azad, told the Assembly yesterday that one Krishan Gopal Singh had taken loan thrice from the Urban Co-operative Bank hypothecating the Gandhi Maidan and platform No 1 of Patna railway station. In the unregistered hypothecation form, the value of the maidan had been shown as Rs 5 lakh, and that of the platform as Rs 7.5 lakhs.

*The Statesman*, July 8



# Larger Share of a Smaller Market

Hansavivek

**NATIONAL ORGANIC CHEMICAL INDUSTRIES** has not so far obtained clearance of foreign collaboration proposals for its pesticides project for which it had received a 'letter of intent' in February 1975. Meanwhile, the company has modified the scope of the project after discussions with government and expects that all formalities will be completed in the course of this year. During 1975, NOCIL's volume of sales was lower than in the previous year, but sale proceeds were higher by 5 per cent since on average, unit selling prices were higher. Even so, gross profit tumbled by as much as 41 per cent, reflecting sharp deterioration of margins. The directors say that decline in market demand continued during the first three quarters of the year and this trend was accentuated by credit constraints experienced by customers as also by power shortages which resulted in reduced production in consumer plants located in various parts of the country. Demand for PVC was particularly affected as no relief was provided in the

high excise duty on plastics. NOCIL's directors add, however, that these unfavourable market conditions notwithstanding the company was able to retain, and in some cases enhance, its share of the available demand for chemicals and plastics. There was a noticeable improvement in demand for all products, with the exception of PVC resins, in the last quarter of the year. Reliefs in excise duties on plastic raw materials and certain plastic finished products and other growth incentives provided in the Central budget should help boost market demand for the company's products in 1976. The directors have proposed issue of bonus shares on a one-for-two basis and payment of an unchanged dividend of 12 per cent. They have also recorded their intention to pay the same rate of dividend on the capital to be expanded by the issue of bonus shares.

**SOUTH INDIA VISCOSE's** 1975 results are disappointing, with lower production, sales and profits. Production

was very much affected by the power cut and labour strike and increased cost of manufacture pulled down margins. According to the management, there was an award by the Labour Commissioner, based on job evaluation, which was implemented in the beginning of the year. A section of workers, not benefited by this award, started a stay-in-strike and this was followed by a general strike of workers. A lock-out was declared from May 19. The lock-out was lifted on June 13, but work could be resumed only a month thereafter. The directors have proposed a dividend of 9 per cent on the capital raised by issue of bonus shares made in the current year and is just covered by earnings. A part of the dividend is expected to be exempt from tax. Of the recommended payment, only 3 per cent is payable after the annual meeting and the balance in two instalments. Last year, the company paid 12 per cent. The company has taken up expansion of the pulp plant to double production to 120 tonnes per day. The first stage of expansion for increasing output by 15 tonnes per day is expected to be completed before the end of this year.

## The Week's Companies

(Rs in Lakhs)

	Nocil		SI Viscose		Borax Morarji		Camphor	
	Latest Year 31-12-75	Last Year 31-12-74	Latest Year 31-12-75	Last Year 31-12-74	Latest Year 31-12-75	Last Year 31-12-74	Latest Year 31-12-75	Last Year 31-12-74
Paid-up capital	1200	1200	490	490	53	40	90	90
Reserves	2427	2235	806	789	46	73	269	233
Borrowings	1734	1964	532	401	43	—	204	185
of which Term borrowings	925	1286	285	366	—	—	140	91
Gross fixed assets	5816	5773	3234	3194	75	72	500	472
Net fixed assets	3000	3371	1315	1490	34	33	377	369
Investments	183	184	29	31	—	—	5	—
Current liabilities	584	396	709	661	85	22	211	171
Current assets	2598	2175	1189	820	192	101	392	310
Stocks	1472	1525	453	412	180	39	110	139
Book debts	1091	623	504	363	11	61	221	159
Net sales	5304	5053	1168	1798	325	317	497	476
Other income	185	148	16	18	1	3	16	9
Raw material costs	2802	2162	261	371	210	201	171	182
Wages	345	302	137	165	28	25	52	51
Interest	189	162	37	38	2	1	25	24
Gross profit (+)/loss(—)	857	1459	381	743	39	37	116	142
Depreciation provision	418	415	215	217	4	3	21	19
Tax provision	100	—	102	310	23	22	49	69
Net profit (+)/loss(—)	339	1044	64	216	12	12	46	54
Development rebate provision	3	825	3	40	1	—	—	14
Transfer to reserves	192	75	—	122	2	8	33	29
Dividend								
Amount	P — E 144	— 144	P — E 66	— 59	P — E 9	— 4	P — E 13	— 11
Rate (per cent)	P — E 12	— 12	P — E 9	— 12	P — E 16.02	— 9.7	P — E 15	— 12
Cover (times)	2.33	1.52	1.00	3.07	1.22	3.00	3.54	3.64
Ratios (per cent)								
Gross profit/sales	16.16	28.87	32.92	41.50	12.00	11.67	23.34	29.83
Net profit/capital employed	6.32	19.33	3.68	13.10	8.45	10.62	8.17	10.63
Inventories/sales	27.75	30.18	38.78	28.47	55.38	12.30	22.13	29.20
Wages/sales	6.54	5.97	11.73	9.17	8.61	7.88	10.46	10.71



The company is awaiting a licence for importing plant and machinery for setting up a polynosic staple fibre plant with a capacity of 20 tonnes per day. SIV also proposes to set up an industrial unit in Malaysia in a joint venture with its Italian collaborators and local promoters in Malaysia for manufacture of wood pulp suitable for rayon and paper. STC has filed a suit against the company in the Bombay High Court for Rs 28 lakhs, being alleged excess reimbursement of loss under export promotion scheme. This is not acknowledged by the company and has not been provided for in the accounts. The company did not earn any foreign exchange last year, but spent over Rs 52 lakhs in foreign exchange by way of interest, difference in exchange, consumption of imported spares and remittance of dividends.

**BORAX MORARJI** had to keep its borax plant shut for 84 days and its boric acid plant shut for 153 days, last year, for want of raw materials. These plants could thus be operated upto 71.6 per cent and 43.6 per cent respectively of their installed capacities. The problem was finally resolved when Government of India permitted the company to import the raw materials directly. Government also announced a liberalised import policy for 1975-76. The company was thus able to import raw materials in large quantities in the latter half of 1975 and to produce satisfactory results for the year though selling prices of borax products were reduced. Dividend is stepped up from 9.7 per cent to 16.02 per cent. Exports dropped, from Rs 26 lakhs to less than Rs 9 lakhs, owing to general recession all over the world and consequent, severe, competition in international markets. The company's expenditure on foreign currency, by way of consumption of raw materials, components and spares, and commission and dividend remittances, amounted to Rs 2.06 crores. The auditors were paid Rs 15,875 for other services and expenses apart from their audit fee of Rs 14,000.

**CAMPBOR AND ALLIED PRODUCTS** completed installation of the plants for manufacture of paramenthane hydroperoxide and sodium acetate, and commissioned these last December. The company has thus implemented the entire diversification project, for which it had issued convertible bonds. Total capital cost incurred on the project aggregated to Rs 124 lakhs. Meanwhile, the company is

engaged in research work for utilisation of carene and longifolene, which are its main by-products, and also for rosin derivatives, insecticides, essential oils and pharmaceuticals. It has developed knowhow for commercial exploitation of pharmaceuticals and essential oils, and proposes to put up a pilot plant to take up process scale-up work. During 1975, the company produced 875 tonnes of camphor — 12 tonnes less than in 1974. In all other items, however, the plant operated much below installed capacity, mainly due to lack of demand. Though net sales looked up a little, gross profit was considerably lower, reflecting pressure on margins. Equity dividend, stepped up 3 points to 15 per cent, is still covered 3.5 times by earnings.

**USHA ATLAS HYDRAULIC EQUIPMENT**, promoted by Usha Telehoist, is establishing a Rs 75-lakh project near Calcutta in association with H Weyhausen of West Germany for manufacture of truck-mounted hydraulic cranes with a licensed capacity of 600 numbers per annum. The German collaborator will not only provide technical know-how and participate in the equity capital to the extent of 37.5 per cent, but also purchase 25 per cent of the annual production of the Indian company. The project cost is proposed to be financed by share capital of Rs 30 lakhs, term loans of Rs 40 lakhs and an unsecured loan of Rs 5 lakhs. The company is offering 11,87,500 equity shares of Rs 10 each and 5,000 preference shares of Rs 100 each to the public subscription, the list for which will open on July 28. The entire issue has been underwritten. According to M K Jhawar, a director, the company will commence production by the end of this year. Jhawar envisages good demand for truck-mounted hydraulic cranes, which are used for speedy handling, loading and unloading of heavy and bulky components, palletised goods, granular materials and various other items.

**MODELLA WOOLLENS** is going ahead with its diversification projects. Modella Steel and Alloys' mini-steel plant at Ratlam in MP has been commissioned and is soon going into commercial production. The terms of collaboration in respect of the project for manufacture of woollen textile machinery have been approved by government and the agreement is being finalised with the collaborator. A licence for import of capital goods required for manufacture of readymade garments has been obtain-

ed. 'Modella International', the export division of the company, has secured substantial orders for export of textiles and readymade garments. Efforts are being made to also export engineering items and foodstuffs to qualify as an 'export house'. Meanwhile, the company's plants at Chandigarh and Thane have been operating on three-shift basis. Production during the first six months of the current year has been keeping pace with that in the same period of 1975, while sales and processing charges have been slightly higher. The order book for the commission combing jobs is satisfactory. The chairman, B M Grover, says that he is looking ahead to another 'promising' year for the company.

**EAGLE VACUUM BOTTLE MANUFACTURING** is diversifying its activities into manufacture of lead crystal glass, which involves highly sophisticated technology. It has entered into a collaboration agreement with Riedel group of Austria, who will make available to it a "most closely guarded secret process". The company hopes to introduce shortly, for the first time in the country, a beautiful range of lead crystal glassware. Besides, it is starting a small unit to manufacture butane gas cigarette lighters. Meanwhile, Eagle has developed some special models of flasks for export. It already has more than 100 models for the overseas markets. Some 52 countries, including a number of technically advanced ones such as UK, France, West Germany, USSR, Poland, Hungary, Czechoslovakia, and Japan, import the company's products. Its exports have risen from less than Rs 10 lakhs in 1970 to more than Rs 40 lakhs in 1975. For the sixth time in succession, the company has won the export badge and certificate of export recognition from Chemicals and Allied Products Export Promotion Council.

**APOLLO TYRES** has completed 80 per cent of the civil construction work and also erected 40 per cent of the machinery. Installation of the imported and indigenous machinery, laying of the piping, electrical cables and other miscellaneous jobs are also proceeding at a fast pace and the management is confident of completing the project within the estimated cost and in the scheduled time. Raunaq Singh, chairman, feels that the high quality of the product coupled with the proposed relief in excise duty to n/w tyre companies will give Apollo a competitive edge in the market.



NEW DELHI

## Inflation Raising Its Head Again?

B M

THE euphoria over the success of the anti-inflationary measures is beginning to lose some of its exuberance. In its wake has come fresh anxiety as the price index has again begun to rise. The wholesale price index began to move up in the second half of March this year and since then in the last three months prices have been rising at the rate of about 2 per cent per month. There is no sign yet of the pressure on prices abating.

The tendency in the government at first was to treat the upward trend in prices as a minor aberration which would soon correct itself. There was nothing in the economy, it was felt, which warranted any serious difficulties on the price front. The rabi crop had turned out to be better than expected. A large buffer stock of foodgrains had been built, partly by liberal imports. Industrial production had been rising and the foreign exchange reserve position was most comfortable. The behaviour of prices was thus seen as being out of alignment with the otherwise very satisfactory state of affairs. But in recent weeks, as prices have continued to record a steady rise, the government is beginning to get somewhat nervous and the usual round of conferences at various levels has started, ostensibly to study and deal with the problem.

The optimists in the government are still arguing that there is nothing seriously wrong with the economy and that the uptrend in prices can be regarded as purely a seasonal phenomenon which speculative elements are trying to take advantage of. But there are others who hold that the pick-up of demand in the economy as a result of expansion of money supply is the main reason behind the pressure on prices. They favour knocking together of yet another anti-inflationary package. From all indications the package will consist mainly of familiar monetary devices to curb aggregate demand.

According to the latest figures released by the Reserve Bank, money supply recorded an expansion of 7.2 per cent during the quarter ending June 22. In the corresponding period of 1975-76, money supply had expanded by 5.5 per cent. Apart from the financing of food stocks, banks' lending to the com-

mercial sector too has been generous. The Reserve Bank authorities have, therefore, begun to lay special stress on maintaining a tight credit policy. The Finance Ministry is also more amenable to such a course now than it was only a short time ago when it was willing to show greater accommodation to the demands of the Federation of Indian Chambers of Commerce and Industry for a more liberal credit policy in order to combat the recessionary tendencies in certain industries.

Another important factor which has generated new strains on the price front is the general reflationary policy initiated by the current year's budget. The concessions granted in direct taxes have had the effect of increasing disposable incomes in the hands of the upper income groups. The Voluntary Disclosure Scheme had earlier improved the liquidity position of these groups by enabling them to convert a part of their black money hoards into white money at a very small cost in terms of tax payment. The step-up in the Plan outlay for the current year without a corresponding effort being made to raise additional resources must also have augmented aggregate demand.

The Finance Minister has decided to continue the scheme for impounding additional DA of workers and other employees for another year, but there is a significant modification in the scheme. The amount to be impounded this year will not be taken out of circulation but will be used by the government for financing its expenditure. The Finance Minister has also proposed that the first instalment of impounded DA and wages due to be returned this year should not be repaid in cash, but should be used by the government to add to the investible resources of the private and public sectors. This was the proposal for the creation of a brand new workers' sector by giving the workers shares in companies against the amount of impounded DA and wages due to be repaid to them. The proposal has not been given up and is being studied by a high-powered committee with a view to giving it practical shape. The government has, however, decided that it

would not be wise to withhold the first instalment of repayment of impounded wages and DA due this month, especially because in the meantime it had been decided to lift all restraints on distribution of dividends.

The main thrust of the anti-inflationary drive launched in 1974 was to curb urban demand, especially of middle class employees and industrial workers. Hence the impounding of wages and DA. Subsequently came a general wage freeze and the cut in bonus. The emergence of recessionary tendencies in certain industries, however, induced the government to extend selective fiscal and monetary concessions to upper income groups to stimulate demand for the recession-hit industries. At no stage of the anti-inflationary effort, however, were the rural rich brought within its ambit. The decision to treat procurement prices as support prices, at least in the case of foodgrains, has resulted in the pumping in of large amounts of money into the pockets of surplus farmers in a year of bumper crops. No part of this incremental income has been mopped up because agricultural incomes are tax-free. What exactly has been the impact of this accretion of incomes in the rural sector is still obscure. But many hold that this must be counted as an important factor in the current price situation. The rise in agricultural commodity prices is certainly to be attributed at least partly to the capacity of the surplus farmers to hold back production from the market.

Another aspect of the price situation which is being examined, or at least should be examined, is the impact of the export drive. The improvement in foreign exchange reserves is attributable primarily to larger aid intake and inflow of remittances from Indians resident abroad which has shown an extraordinary spurt in recent weeks. Exports too are doing well and it has been claimed that the trade gap has been practically closed. How far the foreign exchange reserves can be drawn upon to finance imports of critical items in order to relieve pressure on prices on a selective basis is being looked into. It has been decided to import on a liberal scale edible oils and cotton, in which commodities the spurt in prices has been the most marked. But the Finance Ministry is still very cautious about any large-scale drawing down of reserves. This is because it is concerned about repayment obligations in respect





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of IMF drawals as well as short-maturity deferred payment arrangements which were entered into for petroleum imports in the last two years. It may not be possible, therefore, to depend on foreign exchange reserves to any significant extent to bring down prices, it is argued.

The question being posed in the current round of discussions on the price situation is whether the time has come or will shortly come when in order to hold the price line and to head off another inflationary spiral the government will be compelled once again to revert to stringent regulation of demand by extraordinary administrative, fiscal and monetary measures such as were enforced in 1974. Some argue that this would be an unfortunate development since it would nullify the very cautious measures which have been initiated in the current year to revive the economy and resume the growth process. The anti-inflationary package of 1974-75 turned counter-productive within a short time as recessionary tendencies began to plague several industries, the employment situation took a grave turn and development had to be halted. Right now even though the prices are again rising, the demand recession persists in several industries, not only

those catering to elitist consumption but also industries like coal, steel and heavy engineering as well as others like textiles which cater to the requirements of the masses.

The price problem cannot obviously be tackled on an enduring basis by demand management through conventional fiscal and monetary measures. To be effective, these measures have to be combined with strict and imaginative management of the available supplies in the economy. The needs of mass consumption would have to be accorded first priority in such management. Steps have also to be taken to channel resources, including foreign exchange, for increasing production from existing capacities and for new investment according to a well-conceived order of priorities. The last bout of rampaging inflation, lasting over two years, has, however, created a psychological climate in which the articulate sections of the people as well as the government have come to regard price stability as the prime consideration in the management of the economy and in shaping economic policy. There are signs which indicate readiness on the part of the government to retreat to 1974-75 positions in the name of controlling prices.

Taking into account the higher scales of finance due to increase in the cost of inputs and proportionate increase in borrowings since 1971, the committee puts the total institutional and non-institutional indebtedness of small holders at the end of June 1974 at Rs 132 crores, of which non-institutional borrowings are estimated to be Rs 50 crores.

The committee has expressed its inability to assess indebtedness among the 55 lakh agricultural labourers. However, relying on the Reserve Bank's Debt and Investment Survey, it has roughly calculated the indebtedness among agricultural labourers at Rs 12 crores. The indebtedness of rural artisans from institutional and non-institutional sources is estimated at Rs 7.20 crores.

The committee was also required to estimate indebtedness among industrial workers in urban areas. As in the case of agricultural labourers, the committee was handicapped by the lack of published data. It had, therefore, to rely on information about the operations of moneylenders in Bombay, Thane, Pune, Nagpur, Sholapur and Kolhapur from the annual administration reports of the Bombay Moneylenders Act. The moneylenders, of course, lend to other sections of the population besides industrial workers. Table 1 gives details of the operations of moneylenders in the year ended June 1974. The Page committee has also collected data on the working of co-operative societies of mill and factory workers in the major cities of the state. Table 2 gives some information on the loans extended by these societies as at the end of June 1974. On the basis of these data, the committee has tried to estimate the total indebtedness of industrial workers in the major cities of the state (Table 3). The committee concedes that a

## MAHARASHTRA

# Indebtedness among the Poor

THE Maharashtra government appointed in August last year a committee, under the chairmanship of V S Page, chairman of the state legislative council, to recommend immediate measures to alleviate the distress arising out of indebtedness among the poor and to meet their requirements of finance for production and consumption. The committee was also asked to enquire into the causes of the widespread indebtedness among the poor. The committee submitted its report to the government last week.

In one of its general observations the Page committee emphasises that indebtedness among the weaker sections is the result of their chronic poverty and the wide gap between their income and essential needs. Therefore, to try to solve the problem of indebtedness by giving the poor credit for meeting their consumption needs would be to treat the symptom rather than the illness. The ultimate remedy lies in providing gainful employment to these classes of people and to ensure that their consumption needs are met from their income.

One of the terms of reference of the Page committee was to examine the available data and report on the extent of indebtedness among small farmers, landless labourers and artisans in the rural areas and among industrial workers in the urban areas of Maharashtra. Out of 49.51 lakh cultivator-households in Maharashtra, the number of borrowers from co-operatives was only 20 lakhs. In other words, 60 per cent of cultivator-households were outside the scope of co-operative credit institutions. Even assuming that 20 per cent of the cultivator-holdings do not require any credit at all, there are still about 24 lakh households which depend on non-institutional sources of credit. Of these at least 45 per cent, or 11 lakh households, would belong to the category of small holders. The committee estimates the non-institutional indebtedness of small holders to be Rs 33 crores in 1971. In addition small holders' dues to government on account of soil conservation, and taccavi loans is estimated at Rs 44 crores in 1971.

TABLE 1: LENDING BY LICENSED MONEYLENDERS

District	No of Licensed Money-lenders	Outstanding Loans at the End of June 1974 (Rs in crores)
Bombay	2,600	18.99
Thane	296	0.70
Pune	750	4.88
Nagpur	315	5.05
Sholapur	395	2.57
Kolhapur	590	3.71
Total	4,947	35.90

Source for all the Tables: Report of the Committee on Relief from Rural and Urban Indebtedness, Government of Maharashtra.



TABLE 2: LOANS ADVANCED BY INDUSTRIAL WORKERS' CO-OPERATIVE SOCIETIES

District	No of Mill Workers' and Factory Workers' Societies	No of Members (Lakhs)	Amount of Loan Advanced during the year ending June 1974 (Rupees)	Amount of Loans Outstanding against Members at the End of the Year (Crores)
Bombay	436	6.35	16.64	13.29
Thane	118	0.43	NA	1.61
Pune	34	1.21	0.82	0.54
Nagpur	2	0.02	0.02	0.03
Sholapur	24	0.08	0.53	0.52
Kolhapur	8	0.04	0.15	0.13
Total	622	8.14	18.16	16.12

TABLE 3: TOTAL INDEBTEDNESS OF URBAN WORKERS AT THE END OF JUNE 1974

District	Extent of Indebtedness (Rs Crores)
Bombay	32.28
Thane	2.31
Pune	5.42
Nagpur	5.08
Sholapur	3.09
Kolhapur	3.84
Total	52.02

sizeable volume of moneylending takes place in cities like Bombay and Poona outside the purview of the Moneylenders Act. The loans given by licensed moneylenders and co-operative societies do not, therefore, give a reliable idea of the extent of indebtedness among industrial workers.

Surprisingly, the Page committee has devoted no attention to the question of the rates of interest charged by moneylenders. This serious omission detracts from the usefulness of the committee's effort to estimate the extent of indebtedness, since moneylenders, almost without exception, recover as interest at least as much as the principal sum lent.

The Page committee's observations on the working of the Bombay Moneylenders Act are revealing. The responsibility for the administration of the Act is vested with the Registrar of Co-operative Societies, who, till 1961, was *ex-officio* Registrar General of Moneylenders. Till July 1967, district collectors and the revenue staff under them looked after the administration of the Act. Later, the administration of the Act was brought under the sole jurisdiction of the Registrar of Co-operative Societies and additional inspection staff, at the rate of one inspector for every 500 moneylenders, was created. In some districts, posts of registrars and assistant registrars of moneylenders were

also created. However, this arrangement proved short-lived. The separate staff of registrars and inspectors for the administration of the Moneylenders Act was done away with and the work was once again transferred to the Registrar of Co-operative Societies in 1971.

Table 4 shows the number of licensed moneylenders and the loans extended by them in the three years from 1972 to 1974. During this period while the number of licensed moneylenders has gone down, except in Bombay and Pune divisions, the business of moneylending in all the four regions of the state has gone up considerably. Though separate statistics of loans advanced to different categories of borrowers are not kept by the moneylenders, it is mostly people from low-income groups who approach moneylenders for loans. The increase in the business of moneylending shows the rising need of the poor for money, mostly to meet their consumption needs.

The Page committee emphasises the need for effective administration of the Moneylenders Act and for regulating the operations of moneylenders so as to protect borrowers from various malpractices such as charging of exorbitant rates of interest, improper adjustment of repayments, not accounting for pawned goods and articles in a proper way and use of threats and violence against borrowers. The enforcement of the Moneylenders Act is most cursory at

present. In the three licensing years from August 1972 to July 1974, only 51 cases of illicit moneylending were detected by the government. The total number of prosecutions launched during this period, including in respect of cases detected earlier, was only 61. The committee was also informed by the government that convictions were secured in only 31 cases during the three-year period. The committee has recorded the complaint of the Registrar of Co-operative Societies that his department is unable to cope with the increased work arising out of the operations of the Moneylenders Act in the absence of special staff exclusively devoted to the administration of the Act. Even in a city like Bombay, where there are as many as 2,600 licensed moneylenders, there was no special staff of registrars and inspectors.

The committee has suggested a number of legislative and administrative measures to regulate moneylending and curb illicit moneylending. The present legislation does not provide for any relief to the debtor in respect of unauthorised acts by moneylenders. The committee points out that the objective of curbing unlicensed moneylending is likely to be achieved most speedily if there is easy availability of institutional credit for small and marginal farmers, agricultural labour, industrial workers and other urban poor. The committee has made a number of suggestions for making financial arrangements to meet the consumption requirements of the poorer sections in urban and rural areas. The Reserve Bank, it suggests, should treat the involvement of the owned funds of the co-operative credit structure in the financing of household requirements as a legitimate charge on them and sanction them liberal credit limits for production purposes. Further, it recommends that at all the three levels — apex, district and village — of the co-operative credit set-up, a specified proportion of loanable funds should be reserved for household finance, according to appropriate norms.

TABLE 4: GROWTH OF LICENSED MONEYLENDERS' OPERATIONS

Division	(Amounts in Rs crores)					
	1971-72		1972-73		1973-74	
	Number	Loans Outstanding	Number	Loans Outstanding	Number	Loans Outstanding
Bombay	3,393	16.43	3,640	22.33	3,633	23.89
Pune	2,452	9.78	2,476	11.05	2,476	14.23
Aurangabad	428	1.20	358	1.16	365	1.64
Nagpur	2,573	6.80	2,098	7.04	1,969	10.23
Total	8,846	34.21	8,542	41.58	8,403	49.99



## UNITED KINGDOM

## United against the Blacks

Farrukh Dhondy

THE new Race Relations Act of this Labour Government passed uneventfully through its last stages in the House of Commons. The numbing sensationalism of Enoch Powell's latest outburst on race was the only newsworthy item of the debate. Powell came out of the dark shadows of innuendo and abuse and delineated his political programme on race. The same evening, speaking to a chamber of Commerce in a garden suburb, Powell went further. He defined his philosophy and the logic of his political platform. No good tinkering with welfare or fighting over it, he said. No hope for Britain, economically or otherwise, until it rectified the aberrations it has suffered in its concepts of nationhood. Like other populist fascists before him, Powell allowed his political programme to flow from a mythological assertion about a sacrosanct idea of Britishness.

Britain must break from the European Common Market or she will throw in her lot with the barbarians of Europe and surrender her parliament's sovereignty to a heterogeneous collection of frogs, huns and wops. Britain must stop sliding into the death wish of devolutionary politics. Wales and Scotland should not be given the parliaments that all three major parties have now conceded they will have. In Britain there is only one, and should be only one sovereign legislative body; and that is Westminster. Finally, Britain should send all the blacks home. No voluntary retreat this time. Powell says the time for that is past. He would introduce a programme of compulsory repatriation for the blacks who are undermining the homogeneity of the Anglo-Saxon *Herrenvolk*. Britain is doomed, says Powell, dismembering herself and wilfully injecting the poison of non-British black races into her veins.

Enoch Powell's remarks are directed at the nation. The Race Relations Bill, on which he is speaking, has nothing to do with immigration law. It is simply one more Labour ploy to dodge the responsibility of the State for racism, and represent this government to the world as one that has set its face against prejudice. The Act provides for a Commission on Racial Equality and strengthens the clauses of past Race Relations legislation by specifying penalties for racial abuse, threat or incitement.

In the immigrant community however, the new legislation causes no stir. There is no animated debate about the clauses of the legislation. The black communities of Britain regard the processes of passing laws to ensure their lives and liberties, just as peasants in some countries regard laws which envisage redistribution of land through land-ceiling legislation. To them the law is not a political reality. The executive agencies of the state are a law unto themselves, which take advantage of the ambiguities and latitudes of the statute book to do nothing, or even actively use their powers to encourage racism.

Any State determined to stamp out incitement to racial violence would have arrested and tried Enoch Powell for his public pronouncements about Asians whom he has characterised as a disease, and for his 'prediction' that guns and explosives will settle the race question. If the State had a will to act, it would have arrested and prosecuted Kingsley Read, councillor for Blackburn, who said about the murder of Gurdip Singh Chaggar in Southall: "That was very sad. One down, one million to go." If it had the will, it would have sent down a police force to the countless, daily scenes of lynch-mob intimidation that black men, women and children face in the ghettos of London and Blackburn, Birmingham and Bolton. The State would take to task the editors of newspapers who publish on their front pages the headlines "HOTEL ASIANS SAY WE NEED £115 HANDOUT", and print abuse against blacks in their letters' columns from contributors such as 'G A S Chambers'.

No, there is no earnest of sincerity from the British State on the issue of black people's rights. In the fifties and sixties, the American State, however hypocritically, sent federal troops down to those towns and states where white mobs tried to prevent blacks from exercising their right to vote, where the blacks were illegally denied access to public facilities. In today's Britain there are similar situations, but no public opinion demanding that the State take sides. Take the case of one Bangladeshi family in London's Spitalfields district; Ali, his wife and three children live at present in a slum in Hessel Street. They have waited for years for a Council house to rent. They finally get

to the top of the Council list when the Greater London Council (the municipal body which rents state-owned housing) buys the house and street that they live in, for demolition and redevelopment. Ali is allocated a flat in a Council estate on the Commercial Road. He gets to his new place, having collected the keys from the housing office. The whites on the estate are awaiting his arrival. They rush out with sticks and iron bars. "You ain't comin' in here, Paki bastard. No blacks here. We've kept this estate free of wogs and you ain't living here. We'll kill you and your family if you try and move in." Ali calls the police. Three squad cars arrive. They escort him to the corridor leading to his flat. The way is barred by a mob of fifty whites from the estate who have obviously been anticipating his arrival and discussing their tactics. On the door of the flat allocated to him they have painted "No Wogs Here". The police tell Ali that they can do nothing. He and his friends leave, and explain the situation to the GLC officers. They ask him to come back the next day at ten o'clock, and promise that GLC officers, supported by the police, will let him into the flat which is legally his to occupy. When he turns up the next morning, apart from the racist mob, there is no one in sight. He phones the GLC. Oh yes, Mr Ali, of course. They've decided to transfer his tenancy to another estate where there is no racial feeling.

For himself and his family, Ali is relieved. He will accept the alternative accommodation. For the National Front whose activists live on the estate, it is a victory. For the State, it is an explosive predicament, administratively resolved. None of the politicians is willing to take the position that any group or individual who offers or threatens violence or racial incitement should be arrested under the laws that are supposed to guarantee the freedoms of the citizens of the British Isles.

No, that will not be done. The Labour Party has as yet made no move to counter the rising tide of racism. They only speak, as their senior politician Barbara Castle did on Friday 9th in her constituency of Blackburn, when their own electorate seems to be moving towards votes for the fascists. "Fight against this poison of racism", she tells her audience, "think again before you vote for this alien ideology." Which leaves her audience wondering whether the smell of curry from the neighbours' flat is more alien than the translations of *Mein Kampf*, and leaves the Asians of Blackburn determined to survive without the bolster of the State apparatus.



## CHINA

## A New Kind of Power

Harish Chandola

SOME 56,000 small and medium-sized hydro-electric power stations have been built in the countryside of China over the last 10 years. Hydro-electric power stations, so constructed in 1975 alone, equal the number put up over 17 years before the Cultural Revolution.

By involving hundreds of millions of Chinese peasants in their construction, these power stations have considerably changed the life in the countryside. And, of course, by the electricity they have brought, they have enlivened the political and cultural life even in remote villages and outlying mountain areas. Furthermore, the power thus available has played an important part in the building up of socialist, large-scale, agriculture.

For instance, Enping county in South China's Kwangtung province has in a planned way harnessed the Chinchiang River, which runs across the country, for a conservancy project. This includes a reservoir on the river's upper reaches and nine power stations along its length. In this way the project combines power generation, flood prevention, irrigation, navigation and fishery. The county has installed machinery with a total power generating capacity of 33,000 kilowatts. It irrigates 25,333 hectares, and has reduced the waterlogged area by 4,000 hectares.

Such small and medium-sized power stations have been put up almost everywhere — from the Pearl River in South China to Sunghua River valley in Northeast China. Building of power projects by the masses is a new, consciously socialist, activity that has emerged from the Cultural Revolution. It aims to unfold the ability of the peasants — who account for the overwhelming majority of the Chinese population — to become the main force in building rural power projects and thereby to master modern science and technology. It also shows the path of China's rural power development: viz, that only by relying on hundreds of millions of people can rural power projects be built to yield greater, faster, more lasting and more economical results.

It used to be a common tale that lack of water in several parts of North

China meant that there could be no projects there. But since the Cultural Revolution started in 1966, Chinglung county in Hopei province has put up more than 80 small power stations at the foot of the Yenshan Mountains, drawing on underground water and diverting a group of small streams into several big streams.

It is difficult to build power projects in the plains area due to low water-heads and lack of sharp drops in water. But Shunteh county in Kwangtung province in the Pearl River delta put up a 5,000 kilowatt power station, by building a dam on a tributary on the West River and making use of a water-head of about one metre.

## USING LOCAL CONDITIONS

During the Cultural Revolution, the peasants, backed by the State, put up many small and medium-sized power stations, making use of local conditions. These power stations, connected with the larger power grids of the state, provide varying amounts of electricity to about two-thirds of the communes and to more than half of the production brigades in China's rural areas.

But by far the most important aspect is that the vigorous mass movements, unfolded in developing China's power industry, have built up a tremendous self-confidence among the peasants through bringing local initiative into play. The prefectures, counties, communes, and brigades in Kwangtung province are all engaged in building power projects. In the past decade since the Cultural Revolution, the total generating capacity of the province's small and medium hydro-electric power stations has shot up sixteen-fold. The electricity used for agricultural production in Swatow prefecture is mainly provided by small and medium power stations.

As masters of the power projects, the masses have fully displayed their wisdom and strength and, with State support, have by themselves manufactured and installed the essential equipment. Many commune-run factories can now make equipment for small power stations with a generating capacity upwards of a dozen kilowatts. Many county-and-prefecture-run factories now manufacture generating sets

from several hundred kilowatts to several thousand kilowatts.

Tsinghua University, Chunshan University, and other institutes of higher learning and scientific research and designing, have helped local regions to solve the host of technical problems that arise in manufacturing equipment. The successful manufacture of 500-metre high head hydro-generating set, low head bulb type hydro-generating set, and miniature hydro-generating set, have filled blanks in the output of big state-run factories. By using local materials and combining both modern and primitive methods, the people have created various kinds of equipment for small and medium hydro-electric power stations, thus providing a favourable base for the development of large-scale power projects.

Thus, a contingent, capable in both water conservancy and power development, has grown up in China's countryside. This contingent, having basically grasped the techniques ranging from surveying and designing to construction, installation, operation and management, now represents a real force of production in the fields of industry as well as agriculture.

## SUBSCRIPTION RATES

## Inland

	Students and Teachers (Rs)	Others (Rs)
6 months	18.00	40.00
1 year	35.00	75.00
2 years	60.00	140.00
3 years	80.00	200.00

Concessional subscription rates are available only to students and teachers against certificates from university/college/school.

Concessional rates are not available to subscribers outside India.

## Foreign

Sea Mail	(US \$)
1 year	18.00
2 years	35.00
3 years	51.00

1 year

Air Mail Edition (US \$)

Asia (including West Asia) 30.00

Australia, Japan, Africa, Europe, USSR 35.00

USA, Canada, Latin America, New Zealand 40.00



## INTERNATIONAL AFFAIRS

## Third World News Pool

G P D

THE Third World is soon going to have a news agency pool of its own. The details have been sorted out at the conference in New Delhi presided over by Vidya Charan Shukla. *Le Monde* has come out with a criticism of the distorted news picture of the Third World that the news agencies have so far been giving us. A distinguished French newspaper saying so must have finally clinched the issue in Delhi. A leading white newspaper endorsing the desire of the Third World ministers to have a news agency pool of their own is the most convincing proof of the good intentions of the Third World leadership. It is one thing to be angry with the West, and quite another to be ignored by it. The ministers who conferred in New Delhi, at least some of them, occasionally enjoy an anti-West speech. What, however, hurts them is the we-don't-care-for-you attitude of the West. *Le Monde* has finally assured them that it understands their intentions and that it does not take any offence at what V C Shukla and his African, Asian and Latin American colleagues say.

## NOT VERY KIND

V C Shukla is, of course, right that the Western news agencies have not been very kind to the Third World in the past. But he is clearly in the wrong if he believes that everyone in the Third World has been victimised by the prestigious Western news agencies. It can scarcely be argued that the Western news agencies had been unkind to Marcos or Park or Diem in the good old days. The Western news agencies had been remarkably "objective" when it came to Ayub's Pakistan or the kingdom of Saudi Arabia. Allende's successors in Chile have not suffered because of lack of favourable publicity. It would be hard to find a word of "distortion" in the Western news agencies' accounts of Ghana since the fall of Nkrumah. The Shahen-shah of Iran has been doing rather well in Western news agencies. (So he has been in Samachar as well, but then we must remember that he belongs to the poverty-ridden Third World.)

The list can be extended *ad infinitum*. Which then are the countries which Shukla and his colleague Mohammed Yunus have in mind when they speak of the near-Machiavellian attempts by the Western news agencies to vilify the image of the Third World? To be sure, the fighting Vietnamese were the object of such treatment. The Chinese also suffered the same fate not so long ago. And judging by the Western coverage of whatever is going on in China, one does get the impression that they are still not quite free of vilification. The Chinese are doing no better at the hands of Tass either. If anything, they are getting it worse there.

Thus it is not very convincing to argue that all the countries of the Third World are really at the mercy of the Western news agencies. And if they are, not all of them are necessarily the worse for it. In fact, quite a few of them would not get the bouquets they are getting at the hands of anybody except the West. The Third World must recognise this. Several Generals and autocrats all round the Third World have not at all done badly at the hands of the Western news agencies. If the news has been distorted, it was, and still is, distorted in their favour.

## RAW DEAL

This, of course, does not mean that the Western news agencies have been very kind to the people of the Third World. It is true that certain people who were unlucky not to have a smooth relationship with the Western powers have got a raw deal. But then these cases are not accidents. Nor is it possible to attribute their misfortune to the fact that these people belonged to the Third World.

The plain fact is these people stood in a certain relationship with the managers of the international system. This relationship was one of contradiction. It is only then that the Western news agencies are less than kind. All others who have no reason to quarrel with the managers of the international system cannot claim that the Western

news agencies are distorting the reality in their lands. Most people who gathered in New Delhi last week belong to this group. They have no real quarrel with the managers of the international system. It would be very difficult for them to demonstrate that the international news media have been unfair to them. In fact quite the contrary has been the case. V C Shukla and his fellow delegates from other countries should know this.

## POINT QUITE SIMPLE

The point is quite simple. It is not the membership of the Third World which entitles you to the so-called maltreatment at the hands of the Western news media. It is 'anti-imperialism' which does. The gentlemen who met in New Delhi are not interested in 'anti-imperialism'. All that the New Delhi conference signified is that the news agencies are one more area out of which these people, many of them representing various kinds of oligarchies and autocracies back home, are interested in making some political capital.

It seems certain that they will succeed in this effort. By the time the consultations in New Delhi are over, they would have created one more 'international' institution allowing for a few more foreign trips to a few more people. There is, of course, nothing wrong in foreign trips. But then these people, while abroad, would still want to read the *Time* and *Newsweek* and all the rest. The coverage and the comment that our Press recently bestowed upon the Israeli daredevilry at Entebbe was not a result of any conspiracy by interested international news media. The fact is that that is where our heart belongs, as do the hearts of several others whom Vidya Charan Shukla had gathered together in New Delhi.

But, then, V C Shukla might legitimately argue, is it not true that 'anti-imperialism' or opposition to the managers of the international system comes to you automatically when you belong to the Third World? Comrade Brezhnev and his friends seem to think so. Comrade Hua Kuo-feng and his friends seem to think so too. V C Shukla and his friends who gathered in New Delhi are, therefore, in excellent company. And that should be enough to launch a pool news agency.



# Preparation for Partition

A G Noorani

A LULL in the flow of events is notoriously deceptive and contemporary observers often miss its significance. Much later, in retrospect, does it dawn on the participants themselves, let alone the observers, that, unknown to them, events were being shaped in a way likely to alter radically the existing scheme of things. One such phase was the period between August 1945 to March 1946, between the collapse of the Simla Conference convened by Wavell and the arrival of the Cabinet Mission to India. Apparently, nothing happened; yet it was during this period of lull that the way was paved for the partition of India in a manner few realised then or would have known even today but for the publication of the latest volume in the series of documents on the constitutional relations between Britain and India.\* It was during the period covered by this volume that the homework on partition was done. The economic viability and defence potential of Pakistan, the procedure for bringing it into being, should negotiations on all-India federation fail, the problem of partitioning the Punjab and Bengal were all discussed threadbare.

## POIGNANT PARTITION

The ease with which Mountbatten acted in May-June 1947 was deceptive. For, long before that period all the alternatives had been carefully worked out. Yet between this phase and the partition a year and a half later, came the Cabinet Mission's plan of May 1946 aimed at Indian unity. All of which makes the tragedy of its failure and the consequential partition a more poignant one. It is a most instructive and revealing volume. Compared to it the "revelations" of "Freedom at Midnight" read, like village gossip retailed by talented entertainers.

The crucial question before the British Government as India was about to

go to the polls was whether to revive the Cripps proposals of March 1942 or formulate other proposals to resolve the deadlock between the Congress and the Muslim League on the latter's demand for Pakistan. The Cripps proposals conceded the right of any Province not to accept the Constitution framed by the Constituent Assembly. The manner in which this option could be exercised in the Punjab and Bengal was very much in dispute. Was it to be by a plebiscite or by a vote of the legislature? There would be large dissenting areas within each Province. Would the Provinces be then partitioned? Jinnah was opposed to a plebiscite and also to a partition of the Provinces. He demanded a poll in which Muslims of the Muslim-majority Provinces alone would vote! Cripps suggested that a province should decide by a vote in the legislature and "if the majority for accession to the union is less than 60 per cent the minority will have the right to demand a plebiscite of the adult male population". The League rejected this formula.

After the collapse of the Simla Conference there was a Governors' Conference in Delhi. Reporting its consensus to Pethick-Lawrence, Secretary of State for India in the newly elected Labour Government on August 6, Wavell said, "There was strong feeling that Jinnah's attitude was obstructive, that dangers and disadvantages of Pakistan both from political and economic point of view should be exposed, and that in particular His Majesty's Government should make it clear that they are unable to agree to partition of India on purely Muslim vote". The Governor of Punjab, Bertrand Glancy, urged that the peculiar position of the most important Province in the Pakistan scheme be highlighted "to deflate the theory of Pakistan". He suggested some "clarifying announcement" through an arranged question and answer in the Commons. "Is the word 'Province' to be rigidly interpreted to signify a Provinces as now defined? Does it mean that, if in an existing Province there is a large contiguous area (of the size say of a Division) in which the majority are against separation, the inhabitants must be liable to severance from

the Indian Union regardless of their wishes? If the reply to this question is in the negative, it will give the people in this Province very seriously to think".

Oddly enough while the British were thus grappling with the implications of Pakistan the Indians seemed to be confused. The irony was that the advocates of unity seemed sadly resigned to partition even as early as 1945 while the advocates of partition, fearful of its consequences, hoped that some links would survive. The Congress Working Committee declared on September 15, 1945 that while it was "wedded to Indian freedom and unity", nevertheless "it cannot think in terms of compelling the people in any territorial unit to remain in an Indian Union against their declared and established will". In view of this, Jinnah had only to win the elections in the Muslim majority Provinces to secure Pakistan.

## NO CONCESSION

According to a report of Woodrow Wyatt's discussion with Nehru on January 10, 1946, "Nehru conceded that the British Government might have to declare for Pakistan but said that there must be a plebiscite in border districts to confirm it." Interestingly, only two days earlier Jinnah told Wyatt that "he did not envisage 'predominantly non-Muslim areas like the Ambala Division' remaining in Pakistan but insisted that Pakistan must be 'a living state economically and culturally'". Jinnah made no such concession, however, when he publicly debated the issue with Rajendra Prasad in April 1947. In a personal letter to Stafford Cripps dated January 27, 1946, Nehru pointed out that "the crux of the Pakistan issue is this: A Pakistan consisting of only part of Punjab and part of Bengal, or no separation at all. As a matter of fact the question of Pakistan or separation cannot be considered apart from the question of defence and allied subjects".

The League leaders, barring Jinnah, seemed fearful of the consequences of Pakistan. Aurangzeb Khan, Chief Minister of the Frontier Province, gave Governor Cunningham to understand that he was not in favour of "dismemberment from the rest of India". The Governor of UP reported to the Viceroy on January 2, 1946 a discussion with Chaudhry Khaliquzzaman who made such a desperate attempt in his

\* The Transfer of Power 1942-7; Vol VI: The Post-War Phase: New Moves by the Labour Government August 1, 1945-March 22, 1946: Editor-in-Chief: Nicholas Mansergh, Assistant Editor: Penderel Moon: HMSO, London: Rs 561; available at HMSO Section, British High Commission, Chanakvapuri, New Delhi.



memories to out-Jinnah Jinnah — “but the strong impression that I got when I was talking to him was that he did not believe in Pakistan any more than I do”. The Governor of Bengal grilled Nazimuddin. “He admits that it would be difficult to include the Burdwan Division in Bengal-Pakistan”. When the Governor asked Ispahani if the Muslim League was still absolutely intent on Pakistan and nothing else, Ispahani said that, “as for himself, he was not”. The Governor of Assam’s impression of Saadulla, which he conveyed to the Viceroy on February 5, 1946, was “I am sure that he is not, at heart, a believer in Pakistan — few Assam Muslims are — but he has to support the idea publicly”.

At any rate by August 1945 matters had come to a head and Wavell warned London that “as things are now we cannot evade the issue” of Pakistan. He agreed with the Governors that “the crudity of Jinnah’s ideas should be exposed; and it seems to follow that some enquiry into the possibilities of Pakistan is a necessary preliminary to any further constitutional discussions”. But, Wavell felt, Jinnah would boycott the enquiry and it would exacerbate the situation. This was Jinnah’s greatest tactical achievement. Till the very last moment he evaded giving anything more than the bare outline of his demand for Pakistan.

#### SAFEGUARDS FOR MINORITIES

To this day few care to recall the last but vital para of the League’s Lahore resolution of March 1940 in which the Pakistan demand was formulated. It asked for partition on a communal basis with safeguards for the minorities and concluded thus: “This session further authorises the Working Committee to frame a scheme of Constitution in accordance with these basic principles, providing for the assumption finally by the respective regions of all powers such as defence, external affairs, communications, customs and such other matters as may be necessary”. Did the word “finally” imply an interim centre, as Ambedkar pointedly asked? But the curious part of the episode is that at no stage was Jinnah called upon to produce the detailed scheme promised in his own resolution.

Thereby hangs a tale, recorded in a letter dated December 23, 1940 from Abdullah Haroon, Chairman of the

Foreign Sub-Committee of the League, to Jinnah. He recalled that, “in February this year the Foreign Committee had issued an invitation to the authors of the various schemes of constitutional reform for India, to meet together under the auspices of the said Committee in order to examine jointly each such scheme and see whether a consolidated scheme cannot be finally framed. That invitation was promptly accepted by all the authors, who formed themselves into a Committee and assembled at Delhi, first, in February last, then again in November last. . . . The Committee formed as the basis of its consideration the Resolution adopted by the all-India Muslim League at its last Lahore Session. Obviously this Resolution had been framed by the Working Committee in the light of the outline placed in your hands by me in the shape of a small Memorandum in February last”. The Committee’s Report, unlike the Lahore Resolution, covered the Indian States as well as British India. It recommended not one Pakistan but two Muslim States and an “organic relationship” between these States and the rest of India. In fact it proposed “a common agency to look after in the name of all the component States” subjects like external relations, defence, communications, customs, and “safeguards for minorities and voluntary intermigration, etc”. Jinnah’s reply to Abdullah Haroon has not been published.

*The Statesman* of February 18, 1941 scooped the draft Report. In a letter to S A Latif of Hyderabad dated March 15, 1941, Jinnah disowned the Committee and its report. (For details see, “The Pakistan Issue”, edited by Nawab Nazir Yar Jang Bahadur and Sheikh Mohammed Ashraf, Lahore, 1943.) This denial was the more reason why he should have been asked to produce the report of the Committee promised in his own resolution. This was never done and Jinnah got away with his plea that the principle of Pakistan should first be accepted before the rest could be discussed. Jinnah expressed his views rather more freely in an interview in January 1946 with Arthur Moore, editor of *The Statesman*. In this interview he proposed two constituent assemblies who would “be in close consultation with each other” and jointly decide the frontiers. “These would not be simply the existing provincial frontiers as adjustments would

obviously be necessary.”

In August 1945 Maulana Azad prepared his scheme and sent it to Gandhiji by post. It was duly intercepted and is published in the volume. It envisaged a Centre with parity between the two major communities in the Central legislature and executive, plus the right of secession to the units. Gandhiji’s reply, also intercepted, poured cold water on Azad’s unworkable scheme and wisely advised Azad not to publish it.

#### INTENSE DEBATE

Debate on Pakistan raged intensely within the officialdom also. The modalities of negotiations and the alternatives to partition were all minutely examined. In August 1945, the Viceroy’s advisors, V P Menon included, were all of the view that the Cripps proposals had little chance of acceptance. They favoured an enquiry after the elections by an “individual of acknowledged eminence” into the whole question of Pakistan “on wide terms of reference”. Nothing came of this, or of the proposal to invite Indian leaders to London for discussions. But Wavell pursued his enquiry proposal when he visited London. The Pakistan idea “would not, he felt, stand any objective analysis” and he favoured an enquiry before the elections so that the Muslim electorate would appreciate its shortcomings. On his part Wavell spared no pains to expose them. The note on Pakistan he submitted in August 1945 was the first of many exercises in grappling with the implications of Jinnah’s demand. Wavell was of the view that “on a plebiscite of the whole population, the Punjab would quite possibly not vote for Pakistan”. There were only 16.2 million Muslims in a total population of 28.4 million. Jinnah’s rejection of a plebiscite seems to confirm Wavell’s estimate. Without the Punjab, Pakistan could not have come into being. But, then, a plebiscite in the Punjab was not insisted on in 1947 because there was accord on its partition. Referenda took place only in the Frontier Province and in the Sylhet district of Assam. Wavell also felt that a plebiscite would lead to “civil war”.

On September 19, 1945 the Viceroy announced the British Government’s decision “to convene as soon as possible a Constitution-making body” and to hold consultations after the elections



on whether the Cripps proposal was still acceptable with or without modifications. But he and his advisers pondered on what should be done if the negotiations failed. By November 1945 the Viceroy's advisers had begun thinking of a "breakdown plan". A note by Evan Jenkins, the Viceroy's Private Secretary, dated November 10 foreshadowed not only the partition of the Punjab and Bengal but the detachment of Sylhet from Assam. The partition of 1947 could not have come as a surprise to Evan Jenkins nor to a good many others. For, in December Cripps also expressed the view that London would have to "contemplate" a partition of India "as the only solution." He envisaged two Pakistans, one in the east and the other in the west.

#### FIERCE ELECTORAL BATTLE

Be it remembered that no negotiations were on during this period in India. The observer could see only a fierce electoral battle. But the Viceroy was ready with his "Breakdown Plan", dated December 27, 1945, and sent it to the Secretary of State. It was to be held in reserve and to be enforced if the Congress and the League failed to agree. "We should base ourselves on two points of principle: (a) If the Muslims insist on self-determination in genuinely Muslim areas this must be conceded. (b) On the other hand there can be no question of compelling large non-Muslim populations to remain in Pakistan against their will". In 1947 the British enforced these very principles, but with the agreement of Congress and the League. The bickerings over the Cabinet Mission's Plan and in the Interim Government facilitated the agreement. A distinguished civilian in the Punjab, Penderel Moon, penned a Memorandum of outstanding quality discussing the pros and cons and concluding that in the circumstances partition was "likely to be the right decision" because it had a better chance of acceptance, its merits apart. Thus, British official opinion was fast veering towards the view that partition of India was the only solution and this implied partition of the Punjab and Bengal as well. But in 1945 Wavell was hopeful that faced with his Plan, the League might agree "to remain in the Federation from the start."

The question was how the negotia-

tions could be initiated after the elections were over. It was in January 1946 that a "mission of three Cabinet Ministers" to India was first seriously mooted by the India and Burma Committee of the Cabinet. It also endorsed the basic principles of Wavell's "Breakdown Plan" but "felt that a Pakistan solution might well break down on account of the practical difficulties". These difficulties were fully brought out in the many papers prepared by the civil servants. Maurice Zinkin wrote a note on "the economic possibilities of Pakistan". He predicted a grim future. The output of papers increased after the Cabinet decided to send a Mission of three of its members to India. Various briefs were prepared for them. The editors of the Volume under review lay the reader in debt by reproducing them all in full. The War Staff drew up a note on "the viability of Pakistan from the strictly military angle of the forces required to meet its defence problems". It formed part of a brief on "Viability of Pakistan" from the economic, defence, and financial aspects. "It is hard to resist the conclusion that taking all these considerations into account the splitting up of India will be the reverse of beneficial so far as the livelihood of the people is concerned" concluded the part on the economic aspect. The rest were not more cheerful.

B N Rau's draft treaty between the UK and India on defence and external affairs was a treaty of alliance. The other parts of the treaty concerned relations with the Indian States and "protection for minorities". (The last is fully incorporated in the chapter on Fundamental Rights in the Constitution.)

Meanwhile, the Secretary of State asked the Viceroy for his demarcation of "genuinely Muslim areas". Wavell defined them thus: Sind, NWFP, Baluchistan, and Rawalpindi, Multan, and Lahore divisions of Punjab excluding Amritsar and Gurdaspur districts; in Bengal, the Chittagong and Dacca divisions, the Rajshahi division (excluding Jalpaiguri and Darjeeling), Nadia, Murshidabad and Jessore districts of the Presidency divisions; and in Assam, the district of Sylhet. The staff of the Secretary of State prepared sketch maps showing the demarcation, and offered their own comments one of which simply read — "It is

difficult to believe in the viability of this from the financial, economic or defence standpoints". The reaction of Monteath, the Permanent Under Secretary of State for India was that the result should be used to convince Jinnah that Pakistan would not be viable and to induce him to join "a loose federation".

The Cabinet approved a directive for the Mission to India, phrased in wide terms. The Mission left for India with enormous and well prepared briefs on every aspect of their undertaking. The consultations that preceded their departure all pointed towards partition. Yet, the Mission produced a Plan for an all-India federation which came within inches of success. The next volume in this series of documents on the Transfer of Power will perhaps help us understand better why it failed; but the present one tells us enough to appreciate that the Mission's Plan was a departure from the trend which by March 1946 was well set towards the tragedy of partition. Nirad C Chaudhuri expresses, for once, a commonly held view in "The Continent of Circe". "I assert this with confidence that not even at the end of 1946 did anybody in India believe in the possibility of a partition of the country. Yet within six months it was announced as a policy, and accepted as a proposal, and in less than three months from the announcement of the Plan the monstrous and unnatural partition of India became a fact". But Nirad Chaudhuri is not entirely right either; a few people at least knew that the country was heading towards disaster.

#### INTERESTING NUGGETS

The volume contains interesting nuggets on the INA trials, the RIN mutiny, the US Secretary of State's approach to the British for a military base in Karachi and another base outside Calcutta. But its main value lies in unearthing material on a truly formative period during which all the alternatives were discussed and the result tentatively decided on if negotiations failed — the partition of India, the splitting up of the Punjab and Bengal, even the detachment of Sylhet, and the ruling out of a plebiscite. Only a few knots remained to be tied once the decision was finally arrived at. Mountbatten accomplished that with enormous fanfare and far less skill than he and his acolytes claim.



# Agribusiness in Underdeveloped Agricultures

## Harvard Business School Myths and Reality

Ernest Feder

*In the non-socialist underdeveloped countries there has begun a transformation of the traditional resource-use pattern in agriculture in terms of intensification and diversification of land uses whose consequences would only be a dramatic worsening of the food and resource situation.*

*With the world-wide expansion of capitalism into underdeveloped agricultures under the guidance and control of the industrial countries and their multinational concerns we must soon expect chaotic food conditions, a depletion of agricultural resources at speeds surpassing by a wide margin the resource-wastes of traditional agricultures, a geometric increase in rural and urban poverty and unemployment and consequent inevitable famines.*

*This expansion of capitalism which goes under the name of 'modernisation' represents an aggravation of the traditional agricultural systems with all their defects and vices, but at a much higher level of sophistication.*

*Channelling of resources to the large landholders in the form of new capital and modern technology has the effect of widening the already existing gap in wealth, income and power between the land monopolists and the peasants. This conscious strategy, supported by a multitude of agencies, is bound to increase the contradictions inherent in underdeveloped agricultures through eviction of smallholders, through rise in rural unemployment and underemployment and through deterioration in the conditions of wage employment.*

FORWARD-LOOKING agriculturalists have long recommended intensification and diversification of land uses in underdeveloped agricultures as a means of increasing production and productivity of land and labour. This was to be achieved not by the traditional method of expanding the farming area, but by increasing yields, growing high-value products such as fruits and vegetables and organising intensive livestock operations. Diversification of land uses ought to be undertaken both on the regional and national level and within the farm enterprises. Given the existing land tenure structure a radical change in land use practices would have to come about, so the experts believed, as a result of broad agrarian reforms. The reasons are obvious. The lop-sided distribution of wealth, income and power are disincentives for more production and better work performance, and make it extremely difficult to alter existing resource-use patterns: particularly the non-use or underutilisation of land and labour, coupled paradoxically with the over-exploitation and waste of resources actually in use (erosion, loss of fertility, salinisation, deforestation, etc) which occur in mono-cultures. Agrarian reforms were to end the systematic decapitalisation which results from lack of public and private investments a low

level of technology and farm management, and the continuous transfer of the surplus originating in agriculture to other sectors of the economy or to the industrial countries. Finally the reforms were to set an end to the dearth of food supplies for domestic consumption and to growing food imports to prevent starvation.<sup>1</sup>

No doubt these experts are right. In countries where a revolutionary agrarian reform has been carried out — Cuba, China, the GDR, etc — traditional resource-uses have been radically altered, often with striking results. In fact, it is not unlikely that significant shifts will soon occur in world markets because socialist agricultures are likely to become important suppliers of foods for the underdeveloped countries if they do not themselves undergo radical agrarian reforms.

But who would have believed even ten years ago that in the non-socialist underdeveloped countries there would begin a transformation of the traditional resource-use pattern in terms of intensification and even diversification of land uses, but whose consequence would only be a dramatic worsening of the food and resource situation? With the world-wide expansion of capitalism into underdeveloped agricultures under the guidance and control of the industrial countries and their multina-

tional concerns we must soon expect chaotic food conditions, a depletion of agricultural resources at speeds surpassing by a wide margin the resource-wastes of traditional agricultures, a geometric increase in rural and urban poverty and unemployment, and the consequent inevitable famines. This expansion of capitalism which goes under the name of "modernisation" represents an aggravation of the traditional agricultural systems with all their defects and vices, but at a much higher level of sophistication. With increasing investments and technology transfers from the industrial countries a process of decapitalisation takes place in the underdeveloped countries which surpasses in intensity and speed anything the world has seen.

### AGRIBUSINESS LOOKS AT AGRIBUSINESS

In the industrial countries, the expansion of capitalism into the agricultures of the underdeveloped countries goes under the name of "agribusiness". The term stands for modernisation of agriculture, capitalist-style, by big business. By big business is meant not only the multi-national concern engaged directly or indirectly in agricultural activities or in agricultural-related industries and services but also the international banks (e.g., Chase-Manhat-



tan); the international lending organisations (World Bank; Inter American Development Bank, Asian Development Bank); the "philanthropic" foundations (Ford, Rockefeller, Volkswagen, etc) and the national development agencies (government development ministries, religious organisations, etc) — all directly or indirectly engaged in assisting modernisation.

Big business and the apostles of agribusiness look at agriculture as one enormous aggregate of actual and potential business enterprises in which capitalists have the most important function to play and in which people — particularly the peasants — are non-entities, anonymous cogs in the giant wheels of business firms:

Agribusiness has rapidly become recognised as the most important economic enterprise in the world employing over 60 per cent of the world's economically active population. As we have defined it at the Harvard Business School, it consists of all the participants in a vertical food system from input supplier to farmer to processor to distributor to ultimate consumer.<sup>2</sup>

Agribusiness In Latin America, from which the above quotation is taken and in which the terms "peasant" or "rural worker" are not used even once, continues as follows:

Agribusiness involves those individuals and organisations engaged in the production, processing, transport, storage, financing, regulation and marketing of the world's food and fibre suppliers. In effect, agribusiness is a seed-to-consumer system composed of a series of closely related activities that together enable agricultural produce to flow from the farm to the market place.... Action and decisions taken at one point in the system impinge on the other segments... The interactive nature of the system and the need for close co-ordination is largely a result of the unique agronomic characteristics of agribusiness.

The author argues that businessmen (rather than governments) are best able to co-ordinate the system:

The underlying premise of this book is that by taking a commodity systems approach to agribusiness, public and private managers will be better able to work together in dealing with the interrelated tasks and problems throughout the entire vertical structure from farm supplier to ultimate consumer. This book focuses on the one function that cuts across the entire system and ties it together: management. Effective management is a critical factor in the achievement of a viable food and fibre system which in turn is a major determinant of the economic growth of developing countries.

But from these paragraphs it is not clear what agribusiness actually is; it seems more like a new definition of agriculture in Harvard Business School terminology. However, a few points stand out. First there is the commodity approach, a pure and traditional businessmen's approach, and the very opposite of planning: the overall allocation of all resources and distribution of benefits to the various sectors on an economy-wide basis in relation to aggregate and group needs. If there is any "planning" at all in the agribusiness system, it is done by "management" — on a commodity systems basis, for the people participating in the system. The commodity approach does not necessarily mean a commodity system referring only to one single commodity, although this might be read into agribusiness' definition by agribusiness. It can and often does include a series of commodities which may be competitive or complementary. A single firm may deal in strawberries, melons, onion, citrus fruit, livestock and other products. The tendency of agribusiness is to diversify the commodity system into an aggregate of several commodities as the size of the firm expands. This results in some diversification of the underdeveloped agriculture. But it is a diversification *sui generis*, not for the benefit of producers or the nation but for the benefit of agribusiness since profits (or losses) in one commodity can be offset by losses (or profits) in another, so that the risks of any single commodity venture can be shifted to the underdeveloped producers or handlers.

Secondly agribusiness relies on the social structure as it exists in the underdeveloped countries. This of course is obvious. But neither Austin nor other writers on the same topic provide any idea of the agricultural society into which this new system is being injected and of the forces in favour or against development. One suspects that the agribusiness experts consider the questions irrelevant. What matters is that management monopolises capital and know-how and transfers them to the various lower-level actors in the system in the underdeveloped countries principally for the health of agribusiness itself: agribusiness is interested in the rural society in which it operates only to the extent that it employs some of its components useful and necessary for it. If there is

"development" as a consequence of the operation of agribusiness it is a function of the successful activities of the firms. The welfare of the firms conditions the welfare of the underdeveloped agricultures: a "Trickle-Down" scheme of a world-wide scope.<sup>3</sup>

All this one already knew from the study of the functioning of capitalist enterprises in agriculture. Only the vocabulary is new. What is basic, but not clearly expressed, is that agribusiness looks towards the vertical and horizontal integration of agricultural activities (production, processing, marketing and export) under the control of a single firm or a combination of the-least-possible number of interrelated firms. One characteristic feature is for processing or assembly plants to extend credit and other inputs wherever possible to producers on the contractual understanding that the producers must deliver their output to the lenders/suppliers under pre-arranged terms of sales, although firms may increase their supplies through direct purchases from other producers securing their own financing, or through their own production operations. Production contracts are essential for processing or assembly plants.<sup>4</sup> They offer a guarantee of abundant supplies at minimum risks — risks being shifted to producers or local handlers since their decision-making power with respect to production and marketing is reduced to an absolute minimum as the agribusiness firms acquire at least locally a monopoly status in the commodity system.<sup>5</sup> This has been outlined in innocent, "wolf-in-sheepskin-language" as follows:

In addition to creating rural employment, agribusiness firms may suggest a pattern of co-ordination that makes them less objectionable to local government and industry and possibly more beneficial than local firms. The co-ordinating device... is called a production contract whereby a grower agrees to plant, cultivate and harvest specified crops for delivery to a contracting processor. While preserving the autonomy of the grower, the contract provides the grower with access to technological, managerial and marketing assistance... Contractual co-ordination is effective with relatively small growers and in small developing countries where unimodal agricultural strategies are recommended in preference to the bimodal farming of corporations and subsistence growers... contractual co-ordination is a familiar procurement procedure for manufacturing firms that have long preferred to rely on suppliers to making all their own



needed inputs... The problem of *developing suppliers* across national borders is more complex. Initially international firms chose the familiar but increasingly resented co-ordination through vertical integration. As developing countries built up countervailing political and economic power, they precipitated a wider use of contractual methods of co-ordination, such as licensing, management contracting, franchising, and production contracting.<sup>6</sup> (Emphasis supplied).

That these affirmations are very misleading will become apparent later on, but the issue is also discussed in the footnote.

#### A MORE COMPLETE VIEW

Agribusiness is a misnomer, and it must be questioned whether the economists of the agribusiness school fully understand the nature and implications of agribusiness. The modernisation of underdeveloped agricultures is characterised by the "take over" of and control over all the various agricultural activities in specified "modernised" agricultural commodity sectors by large and medium-sized multinational concerns — properly speaking food concerns or concerns which have branched out from other activities — where the production contract system may be only one element. In the widest sense, agribusiness firms achieve "take-over" and control through massive, combined transfers of capital and technology into agriculture and agriculture-related industries or services. In this process, local producers, capitalists, and handlers are "assaulted" and controlled in the production and marketing of commodities and all the services which accompany them and in the procurement of inputs. The various multinational concerns all work towards a single objective: to make the underdeveloped agricultures dependent on the industrial countries and their multinational concerns and to exercise monopoly control over man and product.<sup>7</sup> It is therefore ingenuous to maintain, as one Harvard Business School economist does, that

International firms, by definition, outsiders, are likely to be innovators. The education of their management is on a level with that of highly developed countries, and their access to corporate financial resources may be at lower interest rates. Through corporate research they generate innovations and through world-wide contacts they disseminate them. A recent study of multinational corporations discloses that the flow of technology is almost exclusive uni-directional from developed to developing countries.<sup>8</sup>

because this hides both the reason and the objective of the action of multinational firms. There is obviously more to agribusiness than merely dissemination of innovations. Transfers of capital and technology are precipitated on one side because industrial capital seeks new investment outlets in the underdeveloped countries and finds very profitable opportunities in their agricultures; and on the other side it is sought by the underdeveloped countries (or imposed on them) because with their outmoded agrarian structure they are incapable of satisfying domestic food requirements and are made to believe that modernisation, capitalist-style, will get them out of the vicious circle of under-production and food imports, and also because capitalists of these underdeveloped countries, by aligning themselves with foreign capital, will reap the rewards offered by new business activities. The optimum repatriation of profits earned from overseas investments requires a maximum of control over the foreign business ventures.

The goal of the transfers of capital and technology is however both economic and political. I shall take up first the economic aspects and refer briefly to the political implications at the end.

Austin's Agribusiness in Latin America, a collection of case studies from Central American countries, gives a partial insight into what is involved in agribusiness in the wider sense of the term. Here is one summarised case study; others are given in the Table.


*Politos SA (Chicks Inc).* This is a chicken breeding operation in the Central American state of "Taragua", a fictitious name owned by one Alvarez, who "entered the poultry business shortly after he graduated from the University of Florida where he obtained a Master's degree in Poultry Science". His first problem was that he "didn't have any capital with which to start the business". He was to get a bank loan of \$3,000 and "a Florida-based exporter sold me 3,000 layer chicks costing \$0.42 a piece with six months to pay for the chicks. I also bought poultry feed during the first half year because the supplier sold it to me on credit... The supplier said it would be impossible for me to make the same quality feed as his large international company did at a cost of \$3 per hundredweight. But I did<sup>9</sup>... The Florida office has originally sold me the chicks with which I started my egg farm. After several discussions with these exporters, we formed a 50-50 joint venture incubating operation in Taragua. My new partners were not inte-

rested in investing in the farm, only the incubator, so I kept my farm and sold eggs to the incubator.<sup>10</sup> We imported incubating equipment worth \$20,000 that had a hatching capacity of 200,000 fertile eggs per month". The business expanded. "In 1968 there was a tremendous upsurge of incubator operations in the neighbouring countries..." "All this resulted in everyone running around practically giving their chicks away; they were selling on credit like crazy..." "In 1969, the other large egg producer in Taragua also set up its own incubator"... "In 1969 there was an egg production glut in the market in Taragua and as a result egg prices plummeted... Because of the difficult situation, my American partners decided that they wanted to sell out their share of the incubating business. I agreed to buy it". Looking around for sales, Alvarez found that "of the 30 farmers that I visited... 27 of them just simply didn't have the money to buy the chicks. They were broke". But he is thinking of buying another, larger feed mill "and that would represent another sizeable investment".<sup>11</sup>

Although this case and others summarised in the Table are designed to demonstrate the miracles which agribusiness heaps on the underdeveloped agricultures, they give, though unintentionally, cause for alarm. If the cases are typical the following conclusions will have to follow: (1) Local agribusiness entrepreneurs are US trained or have US values regarding ways of conducting business and the use of resources. (2) The inputs stem from the US or some other industrial country and amount to sizeable investments. Once a business activity has started successfully, pressure to expand output increases so that more costly inputs are sold in a somewhat chaotic manner. This leads to "erratic behaviour" in the local market, in terms of gluts and price drops, particularly if the foreign venture is oriented towards exports. (3) If capital is transferred, a foreign investor may withdraw and let the consequences of erratic market be borne by the local entrepreneur. This indicates that erratic market behaviour in the underdeveloped agriculture is of relatively little concern to suppliers of foreign technology and capital: to the former, because they have already been paid for the technology, there being absolutely no risk if the funds originate from local lending agencies; and to the latter because they can pull out when market conditions become unfavourable. Agribusiness is good business even if matters go wrong lo-



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TABLE: SOME SELECT CASES OF AGRIBUSINESS IN CENTRAL AMERICA

Country	Type of Business	Name of Company	Comments
Costadura*	Poultry Processing	Avicola SA (Poultry Inc)	Gonzalez is engineer by profession. Started business as a hobby. Now was buying every Friday 7,500 chicks from a company in the US which "seemed to go to extra efforts to give Avicola quality chicks. 32 women in charge of killing; their wages equal 8½ cents (US) "per chicken killed and prepared". When killing many chickens, two work shifts would have been necessary. "It was possible but difficult to obtain more women workers for the second shift. It was for this reason that we thought it convenient to set up a modern slaughterhouse where we could mechanise the process". The supermarkets represented 20 per cent of Avicola's sales. Consequently Gonzalez visited Poultry Equipment Inc, a company in Florida that manufactured the equipment for the mechanised processing of chickens. During his visit the sales manager showed G the operation of a slaughtering system with a capacity for processing 600 chickens per hour. G was amazed at the efficiency of this operation and thought this would be a step forward for his company. The system was to be introduced with a subsequent division of labour and some increase in employment. The slaughtering equipment including a refrigeration chamber cost about US \$ 122,000 (special price as a sales promotion for this new equipment model). The equipment had the advantage that it could be easily expanded. With an investment of only US \$ 24,000 all the necessary equipment to increase the capacity up to 1200 chickens per hour could be obtained and only 12 additional employees would need to be hired. The case study concludes at this point, leaving the reader uncertain whether the equipment was actually purchased or not. Since a loan had been offered by the Costadura Development Bank it is to be assumed that the deal went through.
			Sanduras* Packing plant Empaca Company exporting beef, mainly to the US. Plant has equipment to debone, process by-products, refrigerate and freeze. Empaca sells its meat to 10 US importers-wholesalers who in turn sell to wholesalers or retailers.
Turbia*	Meat Packing Plant	Carnes SA (Meats Inc)	Juan Pasos, recent graduate of Central American School of Management, is general manager. Business exports fresh and frozen meat to the US and Puerto Rico. Plans on setting up feed lot for 10,000 heads. Investment estimated by a group of Argentine cattle consultants and the National Agricultural Bank: US \$ 160,000. Machinery and equipment for a feed mill: US\$ 400,000. The case study concludes on this point without intimating whether the plans were carried out.
Turbia*	Meat Packing Plant	Igosa	Most modern meat packing plant in the region and one of the best-designed in the entire world, exists since 1971. Refrigerated warehouses for boneless meat can store 700,000 lbs. Total cost US \$ 1.4 million. Exports mainly to the US, but firm has import-quota troubles. Offer from Israel to purchase "forequarters" and other items to be packed in polythene bags. Outcome of plans not specified.
Nicaragua	Rice Production	---	Promotion of domestic rice production by National Bank of Nicaragua. During the early 1960s a small group of farmers began planting rice using modern irrigation and mechanisation techniques. The new farms encountered several difficulties in adapting US rice production technology, but later the Bank was convinced that this type of rice farming could be carried out successfully. Plan was to increase irrigated and mechanised rice producing area sharply. The Ministry of Agriculture with the aid of Louisiana State University planned to establish an experimental rice station in 1967, using among other varieties those of IRR I (Philippines; Rockefeller-Ford Foundation). Contemplated investments first year include 2 tractors, 2 harrows, reversible dickey, leveller, harvester, trailer, for a total of US \$ 76,000. second year: tractor, leveller, harvester for total of US \$ 51,000 (both figures include irrigation equipment). Other inputs include fertilisers, insecticides, herbicides, etc.

\* Names of countries fictitious in the book.

Source: Austin, *op cit*.



cally. (4) The foreign supplier of capital and technology is mobile; the local agribusinessman is immobilised. (5) Pressures towards automation are constantly present and employment creation is of even less concern to foreign capitalists and innovators than if they were investing "at home" rather than in the underdeveloped, labour-surplus economies. Employment creation of technology and capital transfers is less important than the repatriation of profits.

#### CAPITAL TRANSFERS AND MOBILISATION OF LOCAL RESOURCES

The modernisation of underdeveloped agricultures implies the transfer of foreign capital into agriculture and agriculture-related industries or services. The capitalists are multinational corporations, multinational banks, international lending agencies and others. Multinational corporations can be very large: a giant food canning concern with global sales reaching up to several billion dollars annually, operating through subsidiaries, joint ventures, or firms operating under licence agreements, or medium-sized concerns which operate only in a few countries with sales perhaps not exceeding a few hundred million dollars. Most studies have been concerned only with the former. Medium-sized multinational firms are usually linked up with giant concerns.

Capital transfers take place in agriculture itself and result in control over land. Control is direct if capital is sunk into farm land: buying up land or obtaining a concession over an agricultural area, be it for agricultural or other purposes. Such capital transfers have traditionally taken place in the plantation sectors, but now occur on an immense scale, as in livestock enterprises or in the staple food sector, and may amount to several hundred million dollars annually.<sup>12</sup> Control is indirect, but no less effective, if land is rented or operated under contract through the production contract system. Here foreign capital is transferred through rentals or credit. A less clear-cut case is when an international lending agency or some "philanthropic" foundation lends capital for development projects. Undeniably it affords the agencies remote control over the land *via* its control over the execution and performance of the project. All these transfers are more or less in the nature of fixed investments.

Once foreign capital has been sunk into agriculture, it is almost certain that it will be followed by transfers into agricultural industries and related services. Such transfers exceed the former by a wide margin. The investments required are likely to be up-to-date, costly and in excess of requirements (i.e., with large unused capacity) and the functioning of the capitalist system requires an unusually large number of unnecessary services (e.g., advertising, legal services, etc.). These investments are needed to control not only production but also distribution. They are necessary mechanisms to repatriate profits in open or disguised form back to the headquarters of the multinational concerns. Capital transfers into agriculture-related industries and services enable multinational corporations to obtain a fuller measure of control over all agricultural activities at all levels. It can be assumed that capital transferred into agriculture and into the agriculture-related industries and services comes by and large from the same or from closely intertwined sources.

Foreign investors also transfer operating capital. The total amount of foreign operating capital to keep going farm production, processing, handling and distribution is likely to be greatly in excess of fixed capital, depending on the commodity. For example, the operating capital to keep a labour-intensive fruit or vegetable industry in operation may be considerably more in excess of fixed capital investment than in a livestock enterprise. While fixed investment is a prerequisite for the control over the commodity system in its totality, operating capital is a prerequisite for the control over the productive processes. This becomes clear in the case of the production contract system. Credit and other inputs furnished by a processing plant or a dealer is the mechanism whereby the latter can manipulate the work and performance of the growers as rigorously as in a traditional agriculture a *hacendado* or plantation management could control tenants, sharecroppers or wage workers through cash advances or company stores. The same is true with respect to operating capital furnished by foreign capitalists to processing plants or dealers.

We cited earlier an author who stated that the production contract system "preserves the autonomy of the growers" in underdeveloped agricultures. To understand why this is a misrepresentation, it is necessary to know the nature of the contracts extended to the growers. There may be some variation in the

terms of the contracts depending on the type of commodity — an important criterion being the degree of perishability of the commodity involved — and with respect to the amount of land under contract for a single producer. But in practically all cases contracts are likely to be one-sided with respect to the ability of the processor/buyer to violate their terms at will. A one-sided contract is a contract where the obligations are mostly on the side of the growers and few on that of the processors/buyers; the contract is incomplete and vaguely worded. A typical case may be a contract where the grower is obliged to deliver his output under conditions determined subsequently unilaterally by the buyer and where an obligation by the processor/buyer to accept the output at pre-arranged terms is absent.<sup>13</sup> This enables the processor/buyer to accept or reject the growers' output as he pleases or to impose penalties in terms of price or quality discounts. This is the result of the lack of growers' associations which processing plants systematically endeavour to prevent from being organised, the lack of adequate government support for the growers, particularly small growers, and the inability of the growers to control weights, quality and prices paid. When a processing plant extends credit to a grower, it may live up to the contract until the moment when the loan has been repaid or nearly repaid. Once assured of repayment, the buyer feels himself freed of the obligation to accept any additional output at "agreed-upon" conditions and will try to obtain the production at the cheapest possible price by using all kinds of tricks. The penalty imposed upon the grower will vary in intensity in accordance with market conditions. If there is a glut, the buyer may refuse the output altogether, or may penalise the grower even before he has repaid his loan.

A crucial question is to what extent the modernisation of underdeveloped agricultures initiated by the transfers of foreign fixed and operating capital engenders the mobilisation of local capital to support and enhance the new ventures. It is a well known fact that foreign capitalists mobilise local capital in order to minimise their own inputs and maximise the number of overseas business ventures. But the mobilisation of local resources does not result in shifting control and decision-making processes to local capitalists. It is therefore pertinent to ask whether the mobilisation of local resources occurs under



similar conditions and to the same extent in the various commodity systems or, within a given system, in its various phases. I advance the hypothesis that under certain conditions foreign capitalists may prefer to attract as little local capital as possible in order to maintain the fullest possible control.

Let me start with an example which may not be exceptional. In the Mexican strawberry industry — the largest fruit export industry of Mexico — both fixed and operating capital is provided principally by US capitalists.<sup>14</sup> Fixed capital is, for example, in the form of investments in processing (freezer) plants. Production credit advanced to the strawberry producers is channelled through US brokers/capitalists/industrialists, owners or part-owners of freezer plants, who use their own resources provided by US banks.<sup>15</sup> Operating capital is also provided in the same manner to the freezer plants, regardless of ownership. Production credit ties the growers to the processors; operating capital for freezer plants fulfils a similar function *vis-a-vis* the brokers. In the beginning, funds originated almost exclusively with US brokers/industrialists. Either Mexican banks were cautious in the face of a risky luxury-crop plantation completely dependent on the US market (about 98-99 per cent of all production going to the US and Canada, the balance being consumed locally or wasted), or US capitalists systematically discouraged local lenders from entering the business.<sup>16</sup> I suspect that the latter was the more important factor. It allowed US capitalists full control over production and distribution, including exports and repatriation of profits. Later local capital entered after it appeared that the industry was profitable, but mostly as fixed capital investment.<sup>17</sup> Although the strawberry industry has been going for nearly fifteen years, operating capital is still mostly provided from US sources both for growers and freezer plants, and even for the Mexican-owned plants since they are all dependent on US brokers and US market outlets.<sup>18</sup> In 1974 the National Federation of Fruit and Vegetable Growers complained that "some 15 [US] distribution firms [brokers] manage the bulk of the production of tomatoes, strawberries, melons and other vegetables" and asked Mexican credit agencies to step in more vigorously to "put a stop to the economic dependency which is the result of US credits".<sup>19</sup> Morrissy, the previously quoted author of "Agricultural Modernisation Through Produc-

tion Contracting" confirms that in Mexico.

Actually little of this money [Mexican bank credit supplied to agriculture] finds its way into growing fruits and vegetables, especially for the fresh market, because bankers consider it too risky. Additional government money is channelled into agriculture, but little is loaned to growers of vegetables for processing. Growers for the fresh vegetable market draw most of their funds as advances from their distributors in the United States, and growers for processors draw advances from the processors with whom they have contracts....<sup>20</sup>

In order to understand why US capitalists continue to use their own, rather than local resources, it is necessary to keep in mind that transfers of capital and technology are important mechanisms to establish and perpetuate an underdeveloped agriculture's dependency upon the industrial countries and their multinational corporations. But they are not the only ones. US capitalists also control distribution channels, (including export) have practically exclusive access to market information, and have long-standing close commercial business relations (often highly personalised) with market outlets in the US and other countries. In conjunction these monopolies form great obstacles to local capitalists entering the industry. It must be assumed therefore that US investors utilise as little as possible of their own capital, or replace it gradually by local resources whenever this is consistent with the exercise of the fullest possible control over all or any phase of their overseas activities and the maximum repatriation of profits, given that the range of possibilities of exercising control available to them is very wide. They use their own rather than local capital if this offers the best guarantee of establishing and maintaining full control, and relax this effort only when the aggregate of the means at their disposal is sufficient so that the entrance of local capital does not present a danger to the fullest control.

In the case of Mexico's strawberry industry, there are certain peculiarities which seem to make it advisable for US capitalists to continue to use their own capital. Unlike many underdeveloped countries, Mexico is able to marshal sufficient capital to organise its own strawberry industry if it set its mind to it, and export the product to other markets independently of US brokers. No doubt this possibility motivates US capitalists to prevent the entry of Mexican resources.<sup>21</sup> The same may be true with respect to other fruit and vegetable

commodity systems now in the hands of US businessmen. Thus the "fullest possible control" over an overseas venture includes the need to eliminate potential competing national ventures, if necessary through the continued employment of foreign capital, notwithstanding the great variety of mechanisms which can assure the foreign investors their domination over production and distribution in a commodity system.

#### LIMITS OF TECHNOLOGY TRANSFERS

It is thus clear that multinational concerns engaged in the food or agricultural input business are capable of transferring the best technologies to the underdeveloped agricultures. The question is: since agribusiness has access to the best and most modern know-how, how much of it does it transfer? All of it? Or some of it? If the latter, why and with what effects? Under existing dependency-relations between underdeveloped countries and the industrial nations and their multinationals, it is inconceivable that the modernisation of agriculture can be achieved without transfer of technology from the latter to the former. The more intensive the modernisation programme, the more ample and varied the transfers are bound to be.

Like capital transfers, technology transfers take place at all levels: in agriculture, and in agriculture-related industries and services. But there seems to be no such thing as a single technology transfer. The use of one foreign technology calls forth, by its own logic, the transfer of other technologies. I have written elsewhere of the *sequential technological package* which the modernisation of underdeveloped agricultures capitalist-style demands.<sup>22</sup> A modernised industry becomes dependent on foreign technologies in all its phases. What is more, transfers of capital and technology are intimately correlated. For this reason it is appropriate to speak about a *sequential capital-technology package* characteristic of the modernisation of underdeveloped agricultures guided by foreign investors. It is precisely the combined assault by capital and technology which makes the control by industrial nations *via* their multinational corporations and the other agencies so effective and all-pervasive. One is bound to conclude that the modernised agricultural sectors in the underdeveloped countries are but extensions (although extensions *sui generis*) of the agricultures of the industrial countries modern enclaves not unsimilar to traditional plantations, though at a much higher level of sop-



histication.

What technologies do the multinational corporations actually transfer? Probably no single answer can be furnished. The reply may differ (a) for different commodities, (b) for agriculture and for agriculture-related industries and services, (c) with respect to agricultures which are just starting to become modernised as against those already dominated by foreign investors, (d) with respect to the type of markets involved (domestic vs export), etc. But perhaps some general propositions can be found.

Let us examine again the arguments of the apostles of agribusiness and limit the discussion to the vertical integration-through-production contracts, admittedly a first-class mechanism to disseminate innovations from international agribusiness firms to underdeveloped producers and handlers. Emphasis is again on the fruit and vegetable sector, although I hypothesise that conditions in other commodity systems — livestock, tobacco, rice, etc — may not be different. Do their arguments reflect reality?

Before examining their arguments I should clarify that I am not referring here to the sterile discussion of sophisticated vs intermediate technology. There is no *transfer* of intermediate technology in the sense of technology adapted to the conditions of underdevelopment ("simple", "less labour-saving", "easy-to-repair", "small", "less costly" or however it may be defined). Under present conditions transfers of technology are made into sectors which are precisely predestined and adapted for the acceptance and use of all types of modern technology, including the most sophisticated know-how and equipment; or else they do not take place. The transfers are guided by the profit-motive of firms producing or peddling inputs. Modernisation takes place principally in the large landholding sector which is entirely suited to all such transfers in terms of enterprise-size, quality of land, availability of water, monopoly access to capital (credit), benefits in terms of public and semi-public subsidies and the ability to secure labour. If small farm units are involved, as in the production contract system, the issue is not that of sophisticated vs intermediate technology, but of the function of technology as a mechanism to eliminate small producers because it forces small holders as a group to adjust to the technologies. To put the issue in a proper focus: technology transfers discriminate between producers; the inno-

vators do not discriminate between levels of sophistication of technology although they may consider transferring good or bad technologies, or a full or a limited range of technologies.

Morriissy's revealing book which we cited previously<sup>23</sup> and which refers specifically to Mexico and Central America, although it would apply with equal validity to other underdeveloped countries, deals with the functions of international agribusiness firms with respect to the transfer of inputs and of know-how. His frame of reference is the action of processing plants. He begins with a discussion of capital vs labour intensive technologies in food processing plants which are, as is well known, less capital intensive than most manufacturing plants, and attempts to justify the plants' need to use labour replacing technologies on various economic and non-economic grounds:

In so far as the processed foods industry is encouraged to create employment, there arises the paradox of using labour saving technologies. *Although available, labour-intensive methods may unwisely trade off quality for economy.* First, health precautions call for the least possible direct handling of the product.... Hand labour techniques, finally, do not produce consistent quality output; machines cannot make spontaneous judgments but their output is consistently uniform. One United Nations Study recommends: "... Labour intensive food processing operations are decidedly more expensive than highly mechanised operations. In labour intensive operations, product quality and sanitation suffer..." *While processing firms that prefer labour saving technologies do create fewer jobs, they avoid risks of damage to a company's or a country's reputation.* They also stimulate farm employment and jobs in the marketing channels downstream. What proponents of labour-intensive technologies sometimes fail to note is that neither individual farmers nor nations as a whole wish to *reap the benefits of a dubious comparative advantage that specialises in unskilled labour.* Mexico, the most developed of the countries in this study, has a wide disparity in the productivity of its farm labour... Mexico would like to close the gap, presumably by raising the small-farm productivity and not by levelling down large-farm productivity.<sup>24</sup>

The author then explains the role of processing plants in transmitting "innovative implementation of agricultural technology to growers":

The explicitness of contract specifications makes production contracts a catalyst for innovations. The components of horticultural technology specified in production contracts are seeds, fertilisers, pesticides and herbicides.<sup>25</sup>

Usually these inputs have to be imported. But —

*When a grower signs a production contract, he has an ally in his efforts to use the best farm technology.* Unlike the non-contracting grower, the contracting grower can expect assistance from the processor in fulfilling the terms of the contract. The processor, by virtue of his interest in the success of his growers, as well as the scalar economies in dealing with many growers having the same problems, has more leverage in dealing with sources of inputs than any single grower acting independently... Processors enjoy economies of scale in employment of field men through whom they close the information control loop... *The monitoring efforts of field men benefit both processor and grower by giving grower access to innovative technology that may increase yields and improve quality.*<sup>26</sup> Large processors particularly large international processors have the greatest chance to fulfil a useful function:

International processors tend to be larger, more inclined to use contracting and to transmit innovative technology than their local counterparts... All international firms [studied] utilised production contracting to co-ordinate the supply of raw produce they processed, as did the larger of their local competitors.<sup>27</sup>

Morriissy continues:

The impact of international firms on the technology of growers is greater than that of local firms.... Both international canners and freezers use contracts as a detailed method of inducing growers to use *agricultural techniques they believe best.* Among freezer firms the international firms designated or supplied all five inputs, whereas the local freezers specified, or provided only 3.3 of them...<sup>28</sup> Freezers specify or provide an average of 4.2 inputs compared to the 3.3 average number of inputs specified or advanced by canners...<sup>29</sup>

International agribusiness firms tend to contract larger growers and Morriissy's argument is worth repeating:

...the question arises as to how much technology is transferred to small growers. Processors needing a large volume of consistently high-quality commodities presumably have a preference for contracting with growers willing and able to commit large areas of land to production contracting. The larger the area under contract, the greater the administrative efficiencies for the processors. However larger farms are likely to have more technologically competent management, and little technological transfer will be gained from production contracting. Growers on small land holdings are in more need of the benefits transferred through production contracting... respondent processors give evidence that they are contracting with small landholders... While this pairing of high-standards processors with high-competence growers is rational and ap-



appropriate, it is less likely to effect technology diffusion than contracting between exacting processors and unskilled growers... [Table 4:4] shows that the range of land area under contract does indeed confirm that international processors deal with large growers...<sup>30</sup>

What the author seems to imply is that processing plants have to make a choice: whether to look for administrative efficiency, which implies lower costs, or for transfusion of technologies to small growers which may provide the plants with additional profits. In the case of large growers, there is the risk of less control on the part of the plants since large growers can band together and secure their own sources of supply of inputs. Morrissey however is evasive on whether processing plants actually contract more large or small growers,<sup>31</sup> although he says that:

All firms deal with growers who have an average of 10 ha under contract, which is a relatively modest farm operation even by the standards of less developed countries.<sup>32</sup>

Similar arguments are found with respect to the transfer of know-how, here called farm management:

There is a growing consensus that international firms are more successful than their local counterparts because of managerial superiority and not because of technological expertise... The gap can be closed by contractual activity of international firms... *Production contracts... are an especially effective device for enhancing farm management because of the special co-ordinating managerial competence of international food firms...* Some of the noted characteristics pertain to food processor management skills in manufacturing and in distribution. Such industrial and commercial skills are not transmitted to growers through production contracts, but food firms do mobilise, finance and direct the activities of independent farmers.

Processors are rewarded for their efforts when bountiful harvests lower the unit price of their purchases and excellent quality crops improve their finished products.

The assistance a grower received from a processor and for which he pays, in however disguised a form, enables him to increase his productivity and consequently his total revenue.<sup>33</sup>

Clearly this type of presentation by one of the apostles of agribusiness has two major aims: to convince the reader of the superiority of multinational corporations and their ability to manage the agricultures of underdeveloped countries, and to prove that underdeveloped growers and handlers have only to rely on the international agri-

business firms if they want to benefit from the best technology available in the world. The trouble with these arguments is that they don't conform to reality.

#### INCOMPATIBLE WITH PROFITS AND CONTROL

In the production contract system, the agribusiness firm sees itself in the role of technical adviser and "innovator" to underdeveloped small and large growers for the use of inputs and management. What kind of technical advice or input can such a firm furnish? None will obviously be furnished which does not profit the contracting firms. The firm must seek to achieve three goals which are likely to be incompatible with each other: to transfer know-how and inputs; to make therefrom profits or secure profits for other multinational firms; and to secure the growers' dependency. If the processor advances inputs in kind purchased at quantity-discount prices, he can resell them to growers at a profit. The per-unit profit may be small, but the overall return may be significant whenever the grower has to rely on the plant as sole supplier of such inputs: it ties the grower to the plant. If advances are made in cash (credit), the plant will earn interests, but the growers are still tied to the plant. But this still does not reflect the all-round situation. The total agribusiness structure is likely to be much more complex. The international firm may have a financial interest in firms producing or handling farm inputs. The larger the plant, the greater the likelihood that the firm is engaged in a whole gamut of activities and has some sort of monopoly status somewhere in the market. The firm may have interests in several commodities or commodity "systems". It may have investments in several food processing plants; in warehouses; in wholesale and retail businesses selling inputs or commodities produced and processed. The likelihood that a grower can obtain disinterested technical advice and the best quality inputs under these conditions can be assumed to be inversely correlated to the size and importance of the international agribusiness firm. This is not a theoretical consideration, but the dismal reality. The normal complaint of growers in the Mexican strawberry industry, a typical agribusiness dominated by multinational brokers/industrialists, is that "technical advice" through what Morrissey calls the plants'

"field men" consists in a promotional activity for the plants' preferred inputs, not necessarily those most appropriate for the grower. The plants' field men are above all salesmen. A plants' field man is not a technical adviser. He is not a trained agronomist able to solve agronomic problems although he may have years of practical experience. In underdeveloped countries not all agribusiness firms have good enough field men to assist all the growers.<sup>34</sup> Only the larger growers receive assistance. It is symptomatic that in the Mexican strawberry industry, during the 1974/75 strawberry crisis, a chemical was widely used on the recommendation of some of the freezer plants' field men, although the chemical had been proscribed in the United States to which the commodity is exported. Huge losses resulted from this "technical advice" for many growers, especially small growers.<sup>35</sup>

#### TRANSFERS TO PROCESSING PLANTS AND COMPETITION

The role of agribusiness as innovator with respect to processing plants is also more complex than one might imagine from reading the Harvard Business School literature on agribusiness. Whenever international agribusiness firms have a monopoly status in the commodity system in underdeveloped agriculture, the technologies used in processing or handling operations may or may not be the most up-to-date. The argument that "there arises the paradox of using labour-saving technologies" in labour-surplus underdeveloped countries because manual labour represents a health hazard seems to be an absurd, even a fraudulent, argument. In fact, many large food plants in the industrial countries used manual labour until automation was introduced to save on the wage bill, and still use it in the underdeveloped countries without "risks of damage to a company's or a country's reputation". There is a whole gamut of mechanisms which ensures through proper supervision and management that necessary health standards are maintained.<sup>36</sup> I do not wish to imply that plant management does not constantly think of replacing labour by machines. But the criterion for selection is more likely to be the costs of plant labour, or in some cases the danger of "labour problems" such as a labour union and not sanitation. As long as processing plant



labour can be exploited by payment of low wages and violation of labour laws, as is usual, labour-saving equipment will not be introduced.

When international agribusiness firms have to face local competition they are likely to play an ambivalent role as innovators. If they take their role as innovators seriously, there should be no difference in transferring the best technology both to the international agribusiness firms (wholly-owned subsidiaries, joint ventures, etc) or to local competing firms. But when the local plants are competitors, the overseas investors will tend to favour first their own operations which will give them at least a temporary market advantage. Local firms would then be obliged to "shop around" elsewhere to be able to compete effectively and survive. This means that the international firm gives up its role as innovator with respect to the local plants and forces the latter to become their own innovators. In this, they may be successful, and it can then be argued that the international firm has set in motion an innovating process which benefits the underdeveloped economy even if it does not benefit the firm and may even harm it. Of course this is not necessarily what happens. The local firm may be unsuccessful because international agribusiness may prevent it from acquiring the innovation or acquiring it at reasonable costs in order to maintain a dominant position in the local market. Agribusiness is an innovator only as long as it benefits from it; the function of innovator which agribusiness claims for itself is nothing but a competitive device to establish and maintain a dominant position in the underdeveloped economy.

It is revealing that agribusiness and its apologists consider their role as innovators as being a permanent one. This is incompatible with their proclaimed desire to help underdeveloped agricultures emerge from their state of underdevelopment. Ideally, the role of innovator should be to transfer know-how and inputs "of the best quality" to enable underdeveloped local growers and processing plants to engage in a process of learning. To paraphrase Morrissey: the transfers should make educated managers out of the underdeveloped entrepreneurs.<sup>37</sup> Consequently underdeveloped entrepreneurs would gradually become so effective that they would take over all the decision-making processes and

become innovators in their own right, including inventors of new techniques. This condition never arises. *The foreign investors least intend to give up their permanent role as innovators.* This makes the theory of agribusiness function "to wed developing country needs to agribusiness interest and capabilities" a myth. It is a myth because the theory fails to reckon with the processes inherent in capitalist expansion.

#### ENEMY, NOT ALLY

Does the underdeveloped grower find in the contracting international agribusiness firm "an ally in this efforts to use the best farm technology"? Overseas investors certainly have complete knowledge of the best farming or processing technologies and quasi-monopoly experience in management know-how. The point I wish to make is that under the conditions under which overseas investment are manipulated, and with the conditions existing in underdeveloped countries, it may not be necessary and may in fact be even unprofitable to transfer *all* the know-how and all the best technical facilities available to the underdeveloped agricultures. This is likely to have the gravest consequences.

Let me again refer to Mexico. In the strawberry industry in Mexico a large number of technological and management defects can be observed which are attributed to the US brokers/industrialists, about half-a-dozen of whom control production, processing and exports. In this context, it is necessary, to note that the US strawberry industry located in the neighbouring United States is operated at a high level of technological and managerial efficiency. Yields in California, which produces most of the strawberry in the US have nearly doubled in about eight years (it rose by 90 per cent between 1966 and 1974) — a fantastic performance. Land and labour productivity is high. All this is known to US strawberry investors in Mexico. They have close business ties with US strawberry industry and know everything that is there to be known about markets for strawberry. This gives them a sort of monopoly status in "strawberry management education", to paraphrase Morrissey. Keeping in mind that these same US overseas strawberry investors practically monopolise the US strawberry

industry located in Mexico, the following facts are truly amazing:

(1) Under the initiative of the US capitalists, strawberries are grown in areas for which it has never been scientifically demonstrated whether they are best adapted to strawberry production or not. Capital investments have been made and plantations have been started haphazardly, without previous soil studies or water tests. After fifteen years of cultivation no more is known about soil and water conditions than when the plantations first started. Once begun, they continued their precipitous course.<sup>38</sup>

(2) After fifteen years, there are practically no research facilities, research projects and adequate laboratories. Small research projects carried out locally receive no support from US and Mexican investors. Mexican government research is inadequate. If the government were to devote larger resources to research, the benefits would accrue principally to the US investors/exporters in form of increased profit repatriation rather than increased foreign exchange earnings, as the Mexicans well realise.

(3) The unsound production methods practised in Mexico are the consequence of the "integrated strawberry system" itself, which implies amongst other things that US capitalists/industrialists have complementary business interests beyond the immediate production, processing and export of strawberries. For example all strawberry seedlings come from the United States. Imported varieties are adapted to United States, not Mexican growing conditions.<sup>39</sup> Research on other varieties is discouraged by US capitalists. The reasons for undermining Mexican research are that, according to US exporters/industrialists, its varieties are "best suited to the US market".<sup>40</sup> Moreover US capitalists thereby import US-produced varieties and earn a profit on the sale of the seedlings. Last but not least, the import of US varieties allows competition between US and Mexican strawberries to continue, since US nurseries benefit economically from the sale of seedlings — a sort of "live and let live" arrangement between US capitalists growing strawberries in Mexico and those in the United States.<sup>41</sup>

(4) The quality of imported seedlings is not the highest. Mexican growers — particularly small growers — receive a quality of seedlings inferior to that used in the United States.

(5) Cultivation practices in Mexico are inferior to California's, even after fifteen years of cultivation. Yields are low although some of the most fertile soils in irrigated districts are employed. Yields tend to decrease in the older plantation areas as soils are increasingly contaminated by diseases, as a result of poor irrigation practices, inadequate preventive measures in soil preparation and poor care of strawberry seedlings. Better cultivation



practices would raise costs of production and necessitate the transfer of more sophisticated and expensive equipment. This in turn would tend to raise prices paid to the growers.

(6) Decreasing yields are no particular problem to the US investors because they can be offset easily by shifting strawberry plantations to new, fertile and clean soils which are abundantly available. Such shifts are now actually taking place.

Here is a clear-cut case of an agribusiness' failure as an "ally in the growers' efforts to use the best farm technology". And this obviously raises the question whether it is an exception or whether we may be able to detect some general processes at work; whenever international agribusiness firms which operate in underdeveloped agricultures at all transfer the "best technology" to the underdeveloped growers and processors.

It is my conviction that we are in the presence of a widespread phenomenon whose significance we have just begin to appreciate to its fullest extent. International agribusiness firms operate in underdeveloped agricultures under unique conditions. Foreign capitalists in search of profitable overseas agricultural investments encounter in the underdeveloped agriculture a peculiar set of elements which, singly or in combination, enable them to earn and repatriate substantially larger profits than from similar investments in the industrial countries. Super-profits and their repatriation are the major reasons for making overseas investments. The foreign investors occupy a dominant, if not a monopoly position in the local economy, and they benefit from low land values or rentals, cheap water, low construction costs, low wages of field and factory workers, and low service costs, such as transportation. To this must be added two crucial elements: the abundance of unused or underutilised resources, mainly land, water and labour; and the possibility of "pulling up stakes" whenever this becomes profitable.<sup>42</sup> In other words, the mobility of foreign capital and technology is extremely high.<sup>43</sup> These circumstances seem to condition the quantity and quality of technology transfers, and consequently the use of physical and human resources. The primary concern of foreign investors is to seek out the cheapest combination of inputs and to maintain costs at minimum levels. Hence it must be assumed that technology transfers will be made in such a manner that they will not unduly raise costs. Only such technology will

be transferred that will guarantee the continued earnings of high profits and the flow of profit-repatriation. In other words, the available resources in the underdeveloped agricultures may be exploited and plundered to the greatest extent possible without investing more know-how and technology than is strictly necessary and by transferring only enough to keep production and processing going without raising costs unduly.

To maintain the profits in the agribusiness production-contract-system, it may be sufficient to keep production going at a given (even low) level of yields with a given (even relatively low) level of investment and technology (including farm management) — or even with decreasing yields as soils are used up, eroded or infested — since aggregate production can be made up easily by increasing the area under cultivation without raising costs to agribusiness, or by shifting to new fertile areas, or by the greater exploitation of other resources (e.g. water and the labour force). These processes are possible because of agribusiness' monopoly position; because there is no scarcity of cheap land, water and labour; and because of the underdeveloped countries' need to earn foreign exchange even under adverse conditions and their difficulty to organise alternative farm enterprises which might be more advantageous to them.

The consequences of partial or lower-quality technology transfers are bound to have disastrous consequences: an ultra-rapid waste and depletion of natural resources and the super-exploitation of the labour force. These grow in geometric proportions with the expansion of capitalism, agribusiness style, into the various commodity systems. As a matter of fact, the same processes are likely to occur not only under production contract systems, but in any type of agricultural enterprise or commodity system run by foreign investors, and even under the unplanned impact of technology transfers to enterprises run by national underdeveloped entrepreneurs in an agribusiness fashion.

It is impossible to overlook the similarity of the action of international agribusiness firms in the underdeveloped agricultures with that of the traditional estate owners with respect to the use of agricultural and human resources which I enumerated in the beginning of this paper. (For example, the traditional practice of shifting cultivations to new areas when the old soils have become depleted, rather than increas-

ing the productivity of the land.) The difference lies in the dramatic speeding-up of the adverse effects on resources and people. *A few more decades of international agribusiness will deprive irreversibly many underdeveloped countries of their best and most valuable agricultural resources.* We are in the presence of an unseemly but not unexpected contradiction: the much-needed intensification and diversification of land utilisation in underdeveloped agricultures leads, under capitalist modes of exploitation, to their impoverishment and decapitalisation and the spectre of famine will soon haunt these countries.

#### OPIUM OR STIMULANT OF ERRATIC MARKET BEHAVIOUR?

Let us return to the argument of one of the apostles of international agribusiness:

When agribusiness commodity systems...are underdeveloped and unbalanced, co-ordination between components of the system tends to be erratic, exposing participants to wide swings in prices and in availability of goods and services. Processors need a co-ordinating alternative to these random market movements without resorting to the extreme of extensive vertical integration.<sup>44</sup>

Its implication is: agribusiness is able, particularly through the production-contract-system, to stabilise markets and prices and thereby transmit larger benefits to the growers. In industrial countries, this may be nearer the truth. For underdeveloped countries it is incorrect. Agribusiness enhances financial risks for local growers, processors and dealers and acts as a disruptive, conflict-engendering mechanism. Why?

I referred earlier to the "sequential technological package" and the "sequential capital-technology package" as a typical future of capitalist expansion in underdeveloped agricultures. Transfers of capital and technology are likely to get started when the financial prospects for a modernised "commodity system" agribusiness-style are good. This is only logical. Industrial capital in search of new investment outlets overseas is not likely to undertake transfers unless they generate profits or unless transferred technology can be paid for. Once such transfers are initiated the probability of further (combined) transfers by the same or some other multinational firm is high. Some local plants might also wish to "get into the act". More and more producers, industrialists and handlers are anxious to participate in the



profitable venture. The impetus for these transfers originates with multinational concerns, firms anxious to sell inputs, transfer innovations and control an ever larger share of the "commodity systems", and with local governments anxious to substitute imports and earn much-needed foreign exchange. The impetus will be supported by bilateral arrangements or by multinational technical, financial and "philanthropic" organisations. The transfers do not obey any systematic development plan but are part of the logic of capitalist expansion guided by the profit motive. Hence the processes are likely to be on the chaotic side. The expansion may be successful and correspond to a real need of the local economy or industrial nation to which the commodity may be exported. All may go well. But all may not go well for ever. The transfers may result in excess capacity, over-production and market crisis. Crises imply large price and other swings — the very development which agribusiness says it wishes to prevent.<sup>45</sup>

Not all ventures turn out to be profitable; but the multinational concerns are not greatly affected by the chaos they create in underdeveloped countries. Inputs are already paid for and installed capacity is likely to have been quickly amortised. For the underdeveloped country, however, it may represent a considerable waste of scarce resources. The waste is likely to be significant whenever fixed installations are not designed for diversified activities, as in the not unusual case of a processing plant handling only one fruit or vegetable crop and remaining idle for a large portion of the year. The waste is enhanced if it also affects employment adversely. But such experiences are not apt to teach the underdeveloped countries a good lesson in the rational husbandry of scarce resources or in the effective "co-ordination between components of the system" able to avoid erratic behaviour and wide prices swings.

The likelihood of more rather than less erratic market behaviour and of larger price swings also results from dependency of the "commodity system" on foreign markets. Evidently not each and every agribusiness activity is directed towards exports. But the modernisation of underdeveloped agricultures is heavily oriented towards exports, both as a result of the control of agribusiness-multinational corporations over production and distribution of the commodities which gives them the right to decide

in which market the commodity is to be sold, the decision depending on their relative profitability (which in turn depends partly on the size and purchasing power of the market), and as a result of the governments' need to earn foreign exchange. I would judge that in at least nine out of ten cases an agribusiness "commodity system" is export-oriented. If prices in the export market are relatively stable, the local agribusiness system may enjoy stability. But we know from years of experience that prices in the industrial countries or in world markets are highly erratic for most food commodities. A price decline in an export market is bound to cause a much sharper price decline, and hence more sharply declining growers' returns, in the underdeveloped agricultures. The situation is most serious whenever a commodity grown in an underdeveloped country competes with production in the industrial country, because during periods of gluts the industrial (importing) country is likely to limit or put a stop to foreign imports. (Price rises are likely to be smaller.) In the Mexican strawberry industry, for example, the decline in US demand for strawberries in 1974/75 resulted in a drastic decline in US imports, enforced partly through US sanitary regulations, with formidable losses for Mexican producers.

The local decline in prices and growers' returns is not only the "natural" consequence of the operation of the market but also of the ability of agribusiness to manipulate prices. Price manipulations can be expected even under relatively favourable market conditions so that agribusiness can purchase the commodity at rock-bottom prices.

#### ANTI-PEASANT BIAS

In production-contract-systems the growers most likely to bear the heaviest losses are the smaller producers, particularly the small-holders. Next in line are local processors or handlers. Modernisation of underdeveloped agricultures, capitalist-style, has a fundamental anti-peasant bias and the production-contract-system is one of the mechanisms to favour large producers and eliminate small producers smoothly and relentlessly over the long run. The preference of international agribusiness for large growers can be taken for granted. Their preference is part and parcel of a set of values acquired in the industrial countries. One of these values is that

large size of enterprise is identical with efficiency.

In underdeveloped agricultures the land tenure pattern makes it difficult or impossible for agribusiness to rely exclusively on large growers, as small holdings outnumber large holdings by a huge margin. There is normally no alternative but to extend contracts also to small producers. Some underdeveloped "commodity systems" include, almost uniquely, small holders before agribusiness enters with its production-contract-system. The natural tendency for international food plants is to foster production concentration, i.e., to favour large growers by giving them priority and better terms in the distribution of inputs and the purchase of their output — a "natural" way to erode the position of small producers. However agribusiness would in all likelihood not go so far as the total elimination of all small holders. Its short run strategy is more complex. Agribusiness needs small holders in order to give its transactions greater flexibility and will "contract with small landholders" — as Morrissey carefully points out — although for different reasons. Small holders can be manipulated more easily than larger growers. If market demand is satisfactory, the plant absorbs a maximum of supplies to maximise its profits and profit repatriation. When demand declines and the plant wishes to reject part of the production or obtain it at heavy discount prices, small growers lend themselves a great deal better to these practices. They are the ideal victims of erratic markets. Morrissey argues, as we noted earlier, that the firms retain small growers because it gives them the possibility of larger technological transfers, pretending (wrongly) that the transfer of the "best know-how and technology" serves to "educate" underdeveloped growers. But we already know that it seeks dependency of producers on agribusiness and preservation of the monopoly position of the latter. Thus the discriminatory practices of agribusiness still maintain the small holder sector notwithstanding the constant simultaneous agribusiness-induced process of erosion to which it is being subjected. In any event, these practices keep all growers disunited, unable to organise effectively, while enhancing the economic polarisation which agribusiness encounters in the underdeveloped agricultures and which is bound



to create actual and potential conflicts at all levels.

### POLITICAL ELEMENT

To conclude, a brief comment on the social and political implications of the modernisation of underdeveloped agricultures, capitalist-style. The expansion of capitalism is a counter-reform and counter-revolutionary strategy, centred around the economic, social and political strengthening of the large landholders. Channelling resources to them in the form of new capital and modern technology has the effect of widening the already existing gap in wealth, income and power between the land monopolists and the peasants.<sup>46</sup> This conscious strategy, supported by a multitude of agencies, is clearly politically inspired. It is bound to increase the contradictions inherent in the underdeveloped agricultures through the relentless eviction of smallholders resulting from an increasing concentration of land ownership, through the rise in rural unemployment and under-employment, and the deterioration of the conditions of wage employment.

During the last few years, the literature on agribusiness has become abundant. Its intention is to demonstrate that the industrial countries — particularly the US — are best able to develop underdeveloped agricultures. I have tried to show that this is false. Amusingly enough, a careful reading of the literature itself will convince an alert reader of the inherent pitfalls of agribusiness: the careless nature of the arguments, the incompleteness of the information furnished and the one-sidedness of the analysis. The literature itself presents a picture of agribusiness, capitalist-style, which is totally adverse to the economic, social and political interests of the underdeveloped countries. But this does not really matter. The clientele of the literature are not the underdeveloped peoples of the third world, but the owners of capital in industrial countries seeking profitable overseas investment outlets. The literature furnishes them with a list of possibilities which can be exploited to their advantage. At best, a few underdeveloped capitalists may find hints on how to become beneficiaries of foreign investments by getting themselves involved as "partners" and exploiters of their countries' human and physical resources.

### Notes

[Paper prepared for the International Research Seminar on The Political Economy of Food, Tampere Peace Research Institute, Tampere (Finland), April 9-11, 1976. The empirical information presented here is based in part on my "Strawberry Imperialism, An Enquiry into the Mechanisms of Dependency in Mexican Agriculture", Institute of Social Studies, The Hague, February 1976 (to be published.)]

- 1 According to a Working Paper prepared by Helena Tuomi for the Tampere Seminar On Food Imports and Neocolonialism, 64 countries increased their dollar purchases of cereals between 1968 and 1973, 7 countries decreased their purchases (most of them only slightly), 2 countries purchased about the same dollar volume, and 6 were exporters of cereals. The data refer to 80 underdeveloped countries in Asia, Africa and Latin America (no data for Uruguay).
- 2 Ray A Goldberg's foreword in James E Austin, "Agribusiness in Latin America", Praeger, New York 1974. This book has an introductory note by Henry J Heinz II (of the multinational food concern Heinz Co), Chairman of the Agrobusiness Council, a non-profit organisation dedicated to bringing the resources and capabilities of agribusiness firms to bear on economic development. "The council identifies and facilitates the development of investment opportunities for its members and assists with the investigations that lead from the first pre-feasibility studies to the final investment decision". It "attempts to wed developing country needs to agribusiness interests and capabilities".
- 3 Agribusiness experts do think of some sort of redistribution. For example J David Morrissey, "Agricultural Modernisation Through Production Contracting: The Role of Fruit and Vegetable Processor in Mexico and Central America", Praeger, New York, 1974, p 2 says: "Agribusiness firms can act as catalysts in transferring benefits especially through their interaction with the agricultural sector". He thinks of the transfer of know-how to production or processing in return for their output. He then quotes a spokesman for United Brand to substantiate his argument. "We have the most efficient production, the best quality product, the best transportation system, and the marketing know-how to take care of ourselves".
- 4 Production contracts are however only one aspect of agribusiness, as pointed out below.
- 5 Production contracts are especially desirable in the case of perishables because there the producers' bargaining power is at its lowest.
- 6 Morrissey, *op cit*, p 4 ff. Morrissey implies that production contracts are a lower form of vertical integration, the most extreme form being when

processors carry on production operations themselves:

When agribusiness commodity systems . . . are underdeveloped and unbalanced, co-ordination between components of the system tends to be erratic, exposing participants to wide swings in prices and in availability of goods and services. Processors need a co-ordinating alternative to these random market movements without resorting to the extreme of extensive vertical integration. Production contracting is a technique whereby processors co-ordinate the flow of a commodity through several components of a commodity system. Since international firms processing fruit and vegetables have extensive experience with contracting, they can be expected to employ it more effectively and more often than local processors who have taken up the innovation recently (p 44).

This misrepresents the situation for underdeveloped countries. Production contracts do not eliminate "swings in prices" and other erratic market behaviours, but allow processors to shift the risks of erratic behaviour to the underdeveloped producers and handlers, as I have shown conclusively in my "Strawberry Imperialism" *op cit*. As a matter of fact, the imbalances are bound to be even larger. The producers' bargaining power tends to be nullified when there does not exist a producers' association. Agribusiness undermines any efforts on the part of the producers in this direction. Second, the decisions on production and marketing are not made by the producers and handlers, but by agribusiness on the basis of their monopoly knowledge of demand and supply conditions in the domestic and export markets. The underdeveloped producers and handlers have no alternative but to rely on agribusiness' judgment. If this judgment turns out to be in error, the "joke" is on the underdeveloped producers and handlers because of the very nature of the production contracts, which I describe more fully in the text below. The effects of price swings, particularly of downward swings, in foreign markets are greatly intensified in the underdeveloped countries, particularly in those cases where the commodity produced in the underdeveloped countries competes with the same commodity also produced in the export market.

The allegations that the advantages of contracting to both grower and processor are that it preserves the autonomy of each is a misrepresentation. Morrissey says:

The processor, as contractor, sets the specifications, and at harvest time judges the degree to which the grower has achieved them; this gives considerable authority to the processor. Tension is inherent in the processor-grower



er relationship because processors negotiate for lowest prices and growers bargain for highest prices. However this tension is offset by the advocacy attitudes of processors who assist growers to use improved technology. As a consequence harvest yields of quality crops increase and prices accordingly decrease (p 45).

He then cites one author who distinguishes between *vertical co-ordination* and *vertical integration*. This is an artificial distinction. The misrepresentation lies in the fact that growers can remain autonomous and

"negotiate" only if they are organised. If not, they are at the mercy of the processor. My colleague Harry Wagenbuur (Institute of Social Studies) has studied one case in Ghana where a world-wide lime-oil monopolist, a multinational concern, was suddenly faced with a producers' co-operative bargaining effectively for higher prices. In this case, the growers were favoured by the fact that the concern had just built a processing plant, that production was in an isolated area and that the government supported the growers. Such cases are

however very rare. In actuality a contracted grower has for all practical purposes the status of a wage worker, particularly if he is a smaller grower, all production decisions being made for him by the processor. The only "autonomy" of the (smaller) growers lies in joining or not joining the production contract system. But in most cases this is similar to the "liberty" of a poor worker to accept or not accept employment. The alternatives are to join or starve.

Vertical integration in its "extreme form" (i.e., production under-

## Indian Council of Social Science Research

### Programmes for 1976-77

#### A. Programmes for doctoral scholars.

1. **Fellowships:** The object of this programme is to provide an opportunity to young persons to undertake research on relevant themes, preferably those identified by the ICSSR as priority research areas.

These fellowships are open to scholars preferably below the age of 30 (35 years in the case of teachers working in colleges, universities and for researchers in research institutions) who have Masters Degree in 1st or Second Division and who are registered for Ph.D. with a recognised university in any of the social science discipline. Preference will be given to those who have already done a good deal of work and are likely to complete their dissertation in a period of not more than two years. Approximately 20 per cent of these fellowships are reserved for Scheduled Castes/Scheduled Tribes. The value of these fellowships is Rs. 400 per month plus an annual grant of Rs. 1,500 for approved contingent expenditure.

In the case of teachers/researchers in colleges, universities, research institutes, etc., the fellowship amount may be determined with reference to the emoluments they would have drawn in their jobs but for the award of the fellowship, subject to a ceiling fixed from time to time.

The last date for supply of application blanks is 9th August 1976 and that for receipt of completed applications in the ICSSR, 9th September, 1976.

2. **Contingency Grants:** Doctoral scholars who are not in receipt of a fellowship/financial assistance by the ICSSR or by any other agency may apply for a contingent grant for field work, computer processing, cartographic work and other approved items of expenditure to the ICSSR at any time during the year. The contingent grant is subject to a ceiling of Rs. 4,500.

3. **Study Grants:** This grant is primarily to assist doctoral students to visit the Social Science Documentation Centre, New Delhi, the Regional Centres of the ICSSR at Bombay, Calcutta and Hyderabad or any other library, institution or Centre in the Country to consult material for their research. The grant is available for a period from 2 to 8 weeks in a financial year. Applications for study grants may be sent to the Directors of the SSDC, 35 Ferozshah Road, New Delhi-1 or of the Regional Centres and some other Centres at any time during the year at least two months before the visit to the Centre is proposed to be made.

4. **Data Processing and Consultancy Services:** Guidance and Consultancy assistance with regard to data processing is available at a few selected Centres namely at Calcutta, Trivandrum, Poona, Ahmedabad and Delhi for doctoral as well as other research workers. Further information may be had from the ICSSR.

#### B Training Programmes in Research Methods :

The following Training Courses are planned for the current year (a course in Econometrics and Regional Planning has already been held from April 26 to June 12, 1976 at Sardar Patel Institute of Economic and Social Research, Ahmedabad)

##### 5 Foundation Courses (6 to 8 weeks)

1. Council for Social Development, New Delhi: 25 October 1976 onwards.
2. Tata Institute of Social Sciences, Bombay from 10 January, 1977 onwards.

##### Discipline Specific Course

1. Psychology: (20th September to 2nd November, 1976) with a focus on "Psychological Problems in Learning and Development in Socially disadvantaged groups" at the National Council of Educational Research and Training, New Delhi.

Law: (October, 1976) Socio-Legal Workshop on "Conflict Resolution and Socio-legal Change", to be held at Delhi University Campus, in collaboration with the Institute of Constitutional and Parliamentary Studies.

##### Data Processing Course

Course in Data Processing to be held in Delhi in early 1977.

All the Courses are intended for providing training facilities to young scholars registered for Ph.D. and college and university teachers/researchers registered/proposing to initiate research work in various social science discipline. The Course in law is open to researchers in law or any social science. Selected candidates will be paid travel cost and their boarding and lodging at the Training Centres will be looked after.

The above programmes are in addition to the regular programmes of the ICSSR in providing financial assistance for research projects, publication grants, maintenance expenditure for attending conferences/seminar overseas. Information about this and other programmes may be had from the ICSSR.

For detailed conditions and publication blanks please write, along-with a self-addressed cover (23 cms x 10 cms) bearing stamps worth 40 paise and marked at the top "Application for Doctoral Fellowship/Training Courses" to Director (Fellowship)/(Training) ICSSR, IIPA, Hostel Building, IP Estate, New Delhi-110 001.



taken by the processing plant itself) differs from vertical integration in its less extreme form (i.e., production undertaken through production contracts) not by the degree of autonomy of the contracting parties, but by the ability of the agribusiness to shift the risks of erratic market behaviours more completely to the underdeveloped growers and handlers. The control over the productive processes by processors is practically the same as if they were undertaking their own production, and in addition to shifting the risks to the growers or handlers allows them additional earnings on credit extended to producers and on inputs supplies. Thus the processor has a role similar to a *hacendado* advancing credit to his workers, sharecroppers or tenants or keeping a "company store".

The use of the term "vertical co-ordination" is suspect. In a plantation using slave labour, management has also a co-ordinating function.

7 For more details, see my "The New Penetration of the Agricultures of the Underdeveloped Countries by the Industrial Nations and their Multinational Concerns", Institute of Latin American studies, University of Glasgow, Occasional Papers No 19, 1975.

8 Morriessy, *op cit*, pp 53 f.

9 This is unusual. The poultry feed business (mainly Purina) is one of the large multinational undertakings in Latin America and other parts of the world.

10 This is a very interesting aspect of agribusiness namely the involved and complex legal arrangements (setting up of several companies or co-operatives, each with specialised functions, profit-oriented or non-profit organisations, etc) partly for purposes of evading taxes. For more details see S Williams and J A Miller, "Credit Systems for Small-Scale Farmers", Studies in Latin American Business No 14, Bureau of Business Research, Graduate School of Business, University of Texas, 1973.

11 Austin, *op cit* pp 14 ff.

12 There is no way of estimating the quantity of these transfers. The money value of these transfers does not reflect the amount of land into which the capital is sunk because land in underdeveloped countries is cheap even if some of the best lands are being included. Some of the land can be obtained "for a song".

13 In Mexico such contracts are called *contratos leoninos*, treacherous contracts, and I assume that they do not differ very much from contracts in other industries elsewhere. In Morriessy, *op cit*, pp 64/5 there appears a "typical contract" and the author states (p 63) that "international firms use the same contract overseas as they do in the United States". (The "typical contract" refers to US growers and a processor). This may be true in a few cases, but the statement is highly

suspect. Compare a contract cited in my "Strawberry Imperialism", *op cit* p 65, fn 2 where the liberty of the processor/buyer to act as he pleases *vis-a-vis* the growers is patent.

14 The term "Mexican strawberry industry" is of course a misnomer. What is involved is a US strawberry industry located on Mexican soils.

15 In some cases, a Mexican bank may provide credit with a specific guarantee of the freezer plants.

16 In hindsight, the local bankers and capitalists were wise in not getting involved, because of the recurrent near-catastrophic crisis (1970/1 and 1974/5) during which strawberry producers, particularly small producers, suffered heavy losses. Mexican capital entered at a time when US demand for Mexican imports was very strong. The Mexican government subsequently invested heavily in government-owned freezer plants, but suffered severely during the most recent crisis. For US capitalists the situation is more complex. They may lose on their fixed investments during periods of gluts, but losses are relatively small if their capital is amortised. (Fixed investments in freezer plants can be amortised in a very short period of time, say 1-4 years.) If the US capitalists are simultaneously plant owners and brokers — the bulk of the exports is actually handled by a handful of US brokers/industrialists — they can make up their losses on fixed investments as brokers obtaining a commission on sales. The larger US firms are able to shift most of the risks of erratic market behaviour to smaller firms or to Mexican-owned plants, and of course to the Mexican producers, particularly small growers. As a result an increasing proportion of the output and exports is handled by a decreasing number of US firms.

17 The ratio of US to Mexican capital is roughly between 4:1 and 3:2.

18 The ratio of US to Mexican "operating" capital may be in the neighbourhood of 8:1 or 7:1.

19 "Strawberry Imperialism", *op cit*, p 14 fn 2.

20 *Op cit*, p 19.

21 Under existing conditions, Mexicans are unable to export strawberries directly to other (say European) markets. Mexican strawberries are now exported to Europe by US brokers, as if they were US-grown. The presence of US capital in the Mexican processing plants makes independent exports impossible.

22 See footnote 7.

23 "Agricultural Modernisation through Production Contracting", *op cit*.

24 Pp 61-2. All emphasis in this and subsequent citations supplied. The reader will note that the author is not consistent in his argument. He jumps from a discussion of technology in processing plants to the issue of labour productivity in farming.

25 P 62.

26 P 68.

27 P 70.

28 This includes also containers. Actually the supply of containers to growers is one of the methods whereby the processors prevent the growers from selling directly to other buyers.

29 Pp 70 f.

30 P 72.

31 His presentation of the argument is cagey. He presents two tables; one showing "the lowest percentage of the contracts by processor type" — which means presumably the contracts involving the 10 per cent of growers with the least amount of hectares — where the international processing firms average 14.5 ha per contract; another with the highest 10 per cent where the average grower has 133 ha. This however means very little. Let us assume that there are a hundred growers under contract. The lowest 10 per cent has 14.5 ha per grower; the highest has 133 ha/grower. But the total hectares for the lower group would be 145 ha, for the higher group 1330 ha. The author does not however say this (p 73). Could anyone still pretend that the international agribusiness firms prefer small growers? If they contract small growers, it is usually because they don't have much choice, although as I shall show later they tend to eliminate the small growers by a variety of "tricks".

32 P 73. This seems debatable if one considers that fruit and vegetables are grown on irrigation land. Most smallholders have much less land, and only few have irrigated land. Actually, the author is applying industrial rather than less developed countries standards.

33 P 77 f; p 85; p 86.

34 In cases of calamities such as diseases or pests the growers still have to turn to experienced and trained technicians. The field men have an additional function which is not so much a transfer of know-how as a prodding or control function, transmitting to growers the the orders of the contradicting plants.

35 "Strawberry Imperialism", *op cit*, pp 114 ff.

36 The argument that health hazards are introduced by the use of manual labour is a vicious argument because it shifts the responsibility of any defective merchandise to labour, when it belongs to management. In many cases, defective food merchandise reaches the market because in their inordinate search for profits management often accepts below-quality raw material.

37 The very idea of an underdeveloped entrepreneur is amusing when one considers that in many underdeveloped countries there is a long tradition of shrewd and highly astute business activities.

38 It is reported that one US strawberry expert came to one of the irrigation districts producing about



- 60 per cent of Mexico's crop exclaiming: "How can you grow strawberries here?" There is an element of exaggeration in this, since the area actually does produce the commodity, although under conditions which have little resemblance to those prevailing in California. These findings are based on the opinions of agronomists; they have been confirmed by field studies. For details see "Strawberry Imperialism", *op cit*, Chapters V and VI.
- 39 Strawberries are highly sensitive to difference in microecological conditions and must be adapted to the region in which they are planted.
- 40 This argument is debatable. One well known strawberry expert maintains that consumers are unable to distinguish between one variety and another. Strawberries are not purchased by consumers on the basis of variety. US capitalists are growing US varieties for reasons of their own convenience and profit.
- 41 Actually the structure is still more complex, since US capitalists operating in Mexico probably have financial interests in US nurseries.
- 42 In this, agribusiness resembles other industries such as the "run-away industries" which move around the globe in search of low production costs, particularly super-low wages. It should be emphasised that the threat of a company "pulling up stakes" is a mighty weapon in the hands of agribusiness because underdeveloped countries' governments are likely to be convinced that agribusiness is aiding development and contributes its shares to foreign exchange earnings; this makes for all kinds of concessions leading to the maintaining of low costs.
- 43 Mobility of capital and technology differs by commodity systems. It is highest for livestock enterprises, forestry, annual crops: lowest in the case of permanent plantations, such as pineapple, bananas and the like.
- 44 Morrissy, *op cit*, p 44.
- 45 Our previously cited example of *Pollitos SA (Chicks Inc)* is a case in point when exorbitant sales of incubators resulted in excess production and many producers going broke. The Mexican strawberry industry is another characteristic example. It developed in gold-rush fashion with an inordinate capacity.
- 46 See "The New Penetration..." *op cit*. See also Erich Jacoby 'Structural Changes in Third World Agricultures as a Result of Neo-Capitalist Developments', in "The Developing Economics" (Tokyo), September 1974; and Cynthia Hewitt Alcantara, "The Social and Economic Implications of Large-Scale Introduction of New Varieties of Foodgrains in Mexico", UNRISD, Geneva (to be published shortly).

## Non-linear Marketable Surplus Functions

Ascke Hati

*An attempt is made in this paper to present certain non-linear mathematical relations between the marketable surplus of paddy and farm-size, as well as the marketable surplus of paddy and the net receipt of paddy.*

*Attempt is also made to chart out a mathematical relation between the proportion of net receipt of marketable paddy and farm-size.*

*Unlike in earlier work on this subject, what is taken note of is the marketable surplus and not the actually marketed surplus.*

IN the search for a relationship between the marketed or marketable surplus of farm produce and the size-level of holdings and other aspects of farm economics that may be looked upon as explanatory variables, the study of Dharm Narain<sup>1</sup> may be regarded as a pioneering one. His principal finding for the rural economy of India as a whole was that, "marketed surplus as a proportion of the value of produce declines upto 10-15 acres size-group, after which it records a steady increase". Another significant result of his study was that farms below this level and those above it account for almost equal proportions of marketed surplus. This led him to conclude that "Only half of the marketed surplus is what may be called a commercial surplus, while other half may be called a distress surplus".

A serious drawback of his findings is that they have not been obtained from any direct observations of marketed or marketable surplus; and many of the assumptions that he makes and statistical

devices that he adopts may not be valid under all circumstances. What he does is to put together data about total value (gross) of agricultural produce as well as different retention components (e.g., consumption of the family, consumption of livestock maintained, seed requirements, kind payments, payments of kind wages and kind rents, etc), which he takes to make his own estimates, from different sources, like, the National Sample Survey, the Agricultural Labour Inquiry Report, the Farm Management Surveys, the National Income Committee Report as well as various papers of individual writers. Finally on the basis of various assumptions, he apportions his data into different size-groups of holdings for arriving at the estimates of marketed surplus which he defines as: total (gross) value of output minus total value of retention. His study, however, could have been extended to suggest a functional relationship between marketed surplus, as estimated by him, and the farm-size. As a matter of fact, the graphical representation of his data

suggests a non-linear relationship between the two; and it appears that the part beyond the size-group of 10-15 acres could be approximated by an exponential curve.

Raj Krishna,<sup>2</sup> however, bases his study on data from observations of a cross-section of farms and villages in different regions of India; but he confines his study to discovering the linear and, sometimes, quadratic relations between the marketed surplus (M) and total quantity produced (Q). On the basis of his analysis he divides the overall range of the volume of output into linear and non-linear zones. He finds in most cases that there exists a strong linear relation between M and Q, and, in very poor and very rich areas it is likely to be non-linear. These observations lead him to draw the following policy conclusions: "It is best for the government to concentrate on inducing increases in farm output without any special discrimination in favour of small or large farms. The nature of marketable surplus function is such, in most



FIGURE 1: FITTED CURVES OF  $S=f_1(X)$ , FOR  $X < 1.98$  HECTARE AND  $S=f_2(X)$ , FOR  $X \geq 1.98$  HECTARE AND THE OBSERVED POINTS OF  $S$  PLOTTED AGAINST  $X$

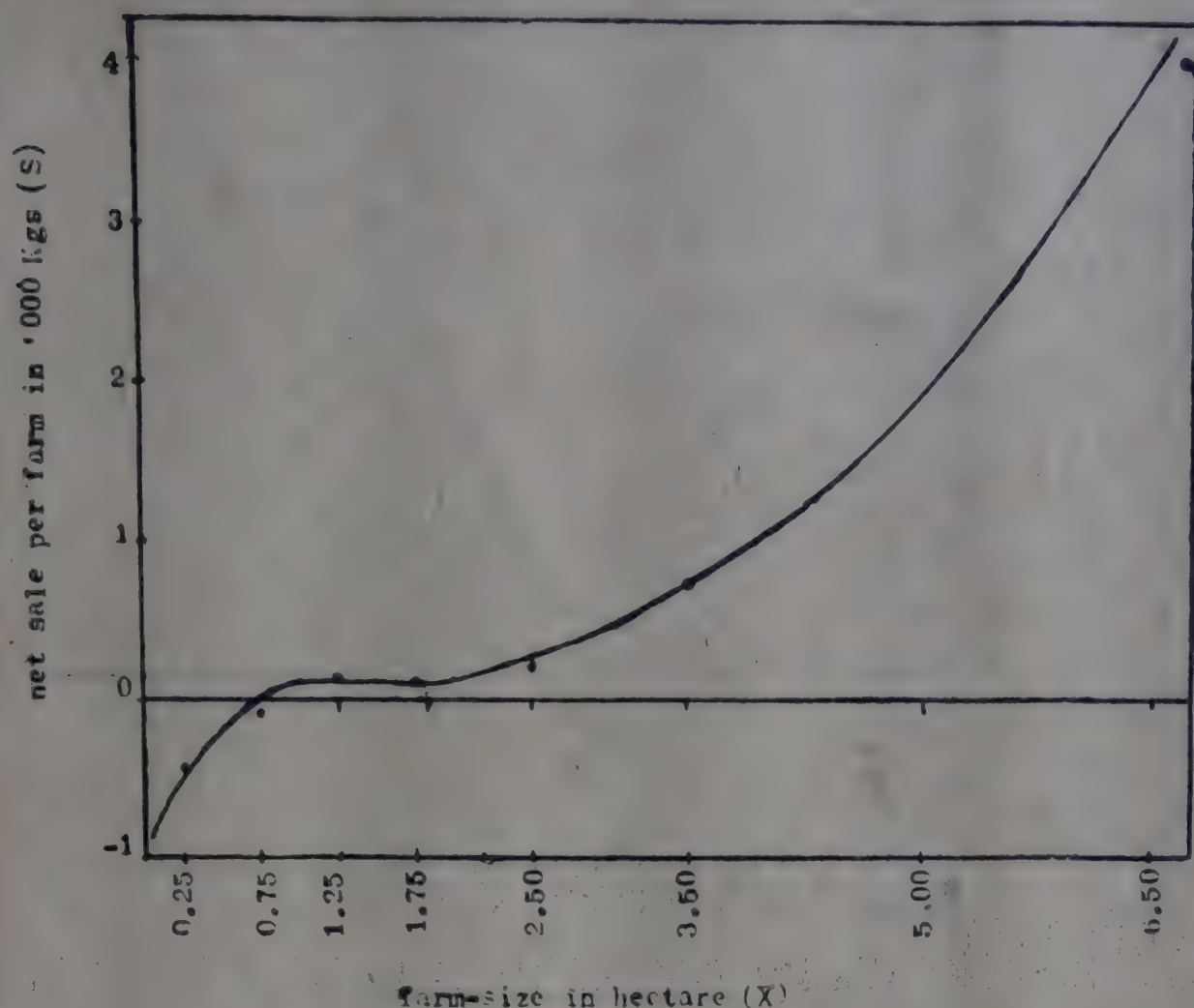
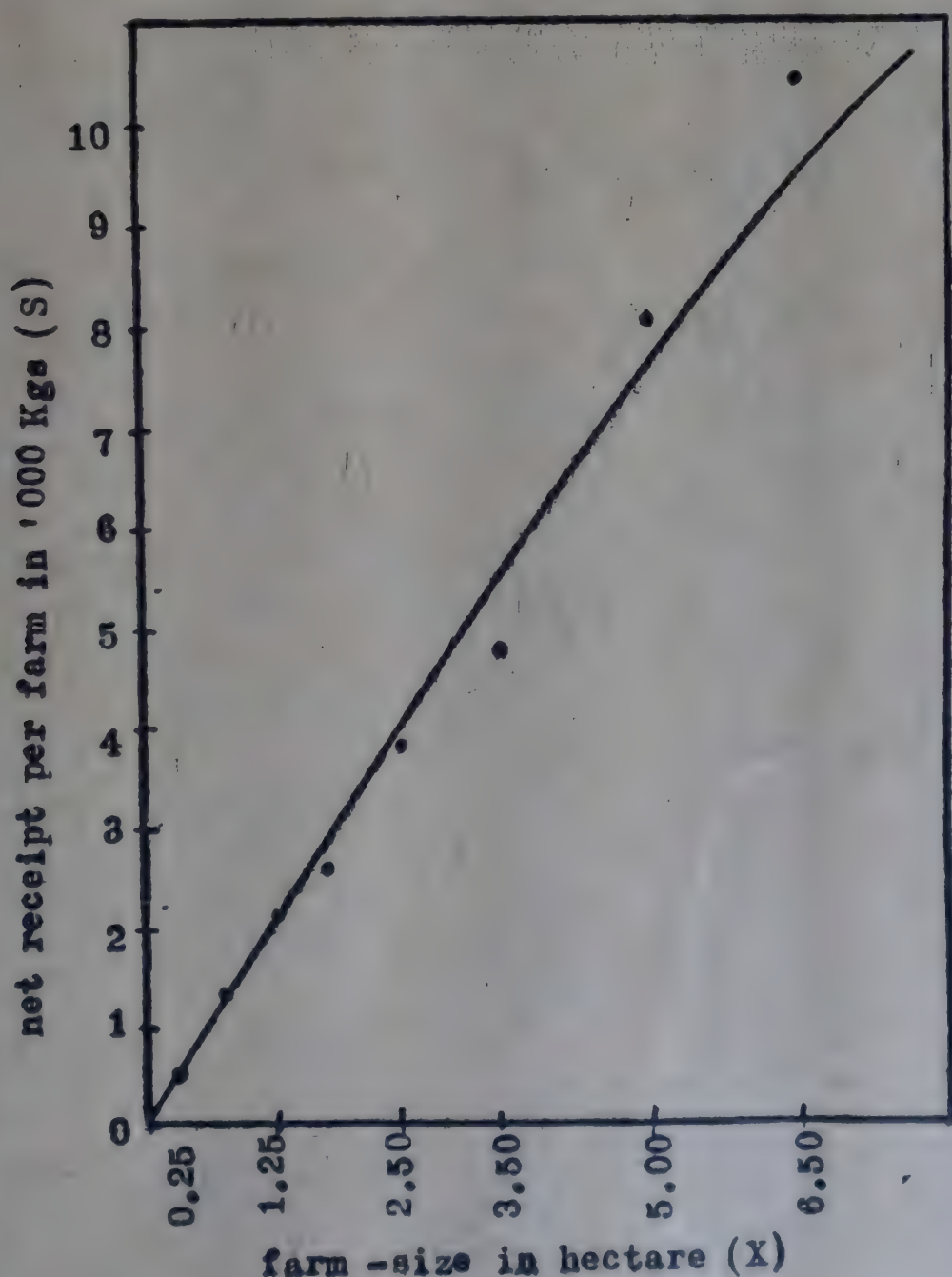


FIGURE 2: FITTED CURVE OF  $R=f_3(X)$  AND THE OBSERVED POINTS OF  $R$  PLOTTED AGAINST  $X$



areas, that the usual arguments for discrimination in favour of large farms do not hold. Even with the farm structure remaining what it is, output increases will lead to more than proportionate increase in marketable surplus without a discriminatory or coercive policy".

Many writers (Rao,<sup>3</sup> Mazumdar,<sup>4</sup> Prasad<sup>5</sup>), commenting on Raj Krishna's findings, have expressed the view that a linear marketable surplus function does not appeal to them as satisfactory; that linearity, in this particular case, violates a matter of common sense and general observation that marketed surplus is concentrated among the bigger-size-class of holdings. We, for our part, share this attitude and offer two further comments on Raj Krishna's statistical conclusions: first, even a good statistical fit of a straight line does not necessarily certify the existence of a linear functional relationship in the population; for, as is well known, any relationship may conveniently be misrepresented by a straight line in a small neighbourhood. Secondly, it would appear that Raj Krishna, in carrying out his statistical fits, must have ignored the observations of zero or nearly zero values of the gross sale below his cut-off point on the x-axis. In that case, to what extent is he correct in talking about a good fit without qualifications?

Kalpana Bardhan<sup>6</sup> used the village level cross-section data to run regressions of marketed proportion of production (Y) on production of foodgrains in quantity per adult ( $X_1$ ), along with other explanatory variables namely, the average price of foodgrains for cultivators ( $X_2$ ), the value of production of commercial crops other than foodgrains per adult unit ( $X_3$ ), average income of cultivators from sources other than the crop production ( $X_4$ ), index of concentration of cultivated area ( $X_5$ ), other disposals of foodgrains (other than sale) minus other receipts of foodgrains ( $X_6$ ). From her findings of consistent and significant positive regression co-efficient of Y on  $X_1$ , she asserts that the volume of marketed surplus is a quadratic function (with positive second order derivative) of average level of foodgrain production. (Incidentally the regression co-efficients of Y on  $X_3$  are sometimes positive and sometimes negative, though insignificant throughout. All other co-efficients of Y on  $X_4$ ,  $X_5$ ,  $X_6$  have expected signs, namely, negative, positive and negative respectively for  $X_4$ ,  $X_5$  and  $X_6$ ).

We may mention at this stage that all these studies involve gross sale which is always non-negative as distinguished from the concept of net



sale; i.e., net of purchase. As is well known, in India, small producers sell after harvest and purchase later on in the lean season for meeting consumption needs. The concept of netting is thus essential to the very definition of marketable surplus as distinct from marketed surplus. The concept of gross marketed surplus, as adopted by earlier writers, in effect rules out any consideration of the phenomenon of distress sales. We propose in this article to count with the net concept.

#### THE DATA

Our data in the present study relate to a sample of 150 cultivating households distributed over 15 villages of the Hooghly district of West Bengal. The selection of households (10 from each village) in each village has been done on the basis of the principle of systematic random sampling. The selection of villages has been done on the basis of the principle of multi-stage sampling. The data relate to the three years 1970-71, 1971-72 and 1972-73 which are put together by taking suitable weighted average of the relevant variable values. We have felt justified in so pooling together the three years' data, as a separate exercise with the same set of data indicated to us that the price changes during these three years did not significantly affect relations between output and other relevant variables.

#### THE RESULTS

A glance at the Scatters of points representing

- (i) net quantity of paddy sold per farm (S) plotted against the farm-size in hectare (X) (Figure 1).
- (ii) net quantity of paddy receipt per farm (R) plotted against farm-size in hectare (Figure 2).
- (iii) S against R (Figure 3).

rules out the possibility that any of the three pairs of variables could be satisfactorily represented by any linear relationship. It appears to us that we require not one but two mathematical curves to be grafted to give a satisfactory representation of the pattern of dependence of S on X. A lot of trial and error has led us to the following grafting.

$$(1) S = f_1(x) = A - Bx^\beta$$

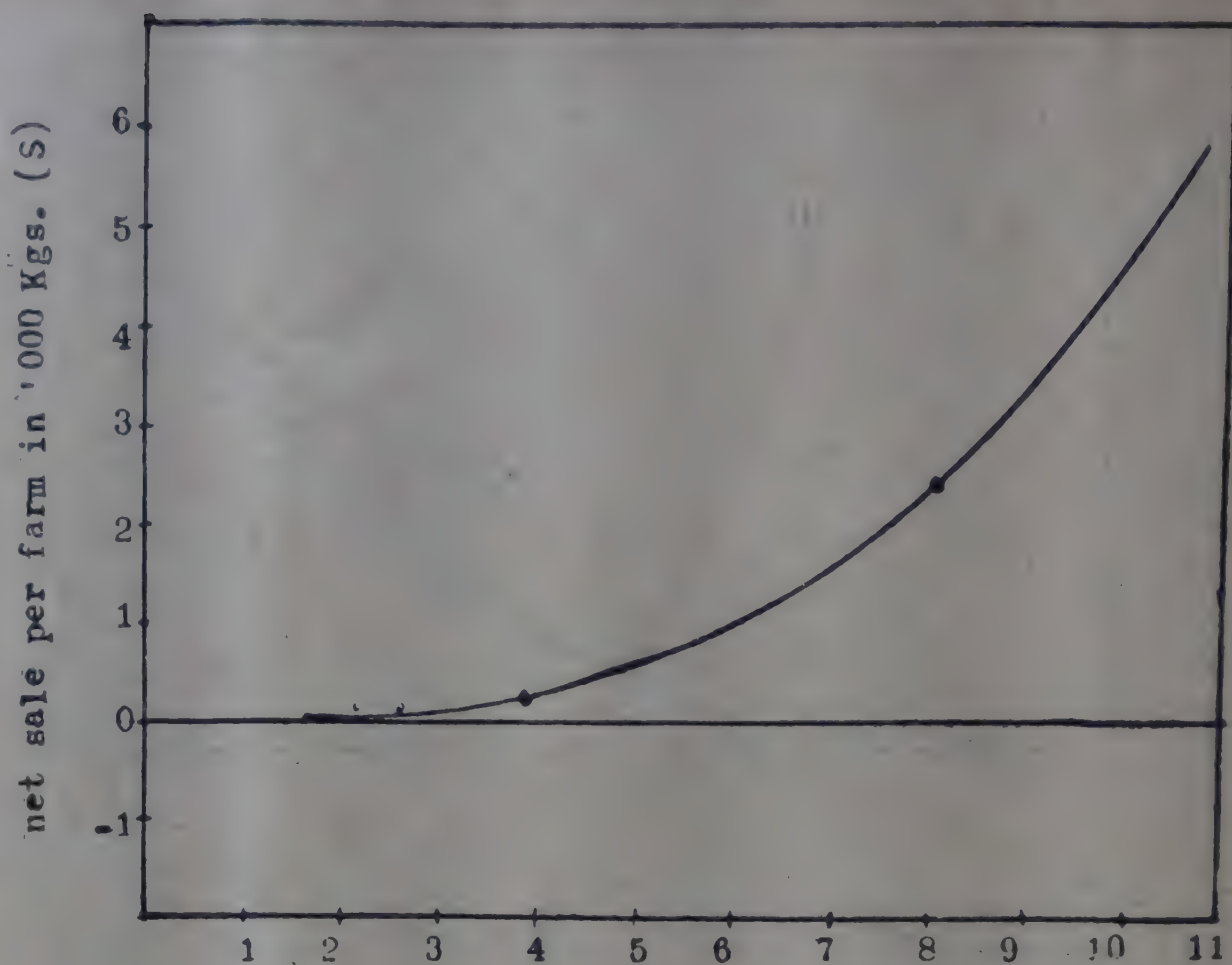
$$= 200 - 116.24x - 1.32256$$

for  $x < 1.98$  hectares

and

$$(2) S = f_2(x) = Cx^\gamma$$

FIGURE 3: FITTED CURVE OF  $S=h(R)$  FOR POSITIVE VALUES OF S AND THE OBSERVED POINTS OF S PLOTTED AGAINST R



net receipt per farm in '000 Kgs. (R)

$$= 23.60x^{2.73602}$$

for  $x \geq 1.98$  hectares

$$(D = 0.0277, \forall x)$$

where D, a crude measure of goodness of fit,\* defined as follows:

$$D = \frac{\sum (S_o - S_e)^2}{\sum (S_o - \bar{S}_o)^2}$$

where,

$S_o$  = observed value of net sale

$S_e$  = fitted value of net sale

$\bar{S}_o$  = arithmetic mean of  $S_o$  values

The first curve tends to an asymptote at 200 kilograms and has a negative second order derivative all through,  $\beta$  being negative. The second curve possesses a positive second order derivative all through. As a result the combination produces a curve which is negative to start with, rises sharply and then flattens out at about the level of 200 kilograms and then rises sharply again at an increasing rate. It is, however, to be noted that for fitting the first curve the values of  $x \leq 1.75$  hectare are considered and for fitting the second curve the values of  $x \geq 1.75$  hectare are used so that the value of  $x = 1.75$  hectare is used for both the

fits; and the point of intersection of these two curves is arrived, numerically, at  $x = 1.98$  hectare approximately.

Now as to the dependence of R on X, that the functional form given below should give a good fit does not surprise us:

$$(3) R = f_3(x) = ax^\alpha = 1731.30x^{0.909}$$

$$(D = 0.0214),$$

where D bears the similar definition as above we feel all the more confident about grafting of the two functional forms  $f_1(x)$  and  $f_2(x)$  when we notice that the functions given below give satisfactory fit to the observed ratio of S/R plotted against x (Figure 4).

$$(4) g(x) = \frac{f_1(x)}{f_3(x)}, \text{ for } x < 1.98 \text{ hectare}$$

$$= \frac{f_2(x)}{f_3(x)}, \text{ for } x \geq 1.98 \text{ hectare}$$

$$(D = 0.0615)$$

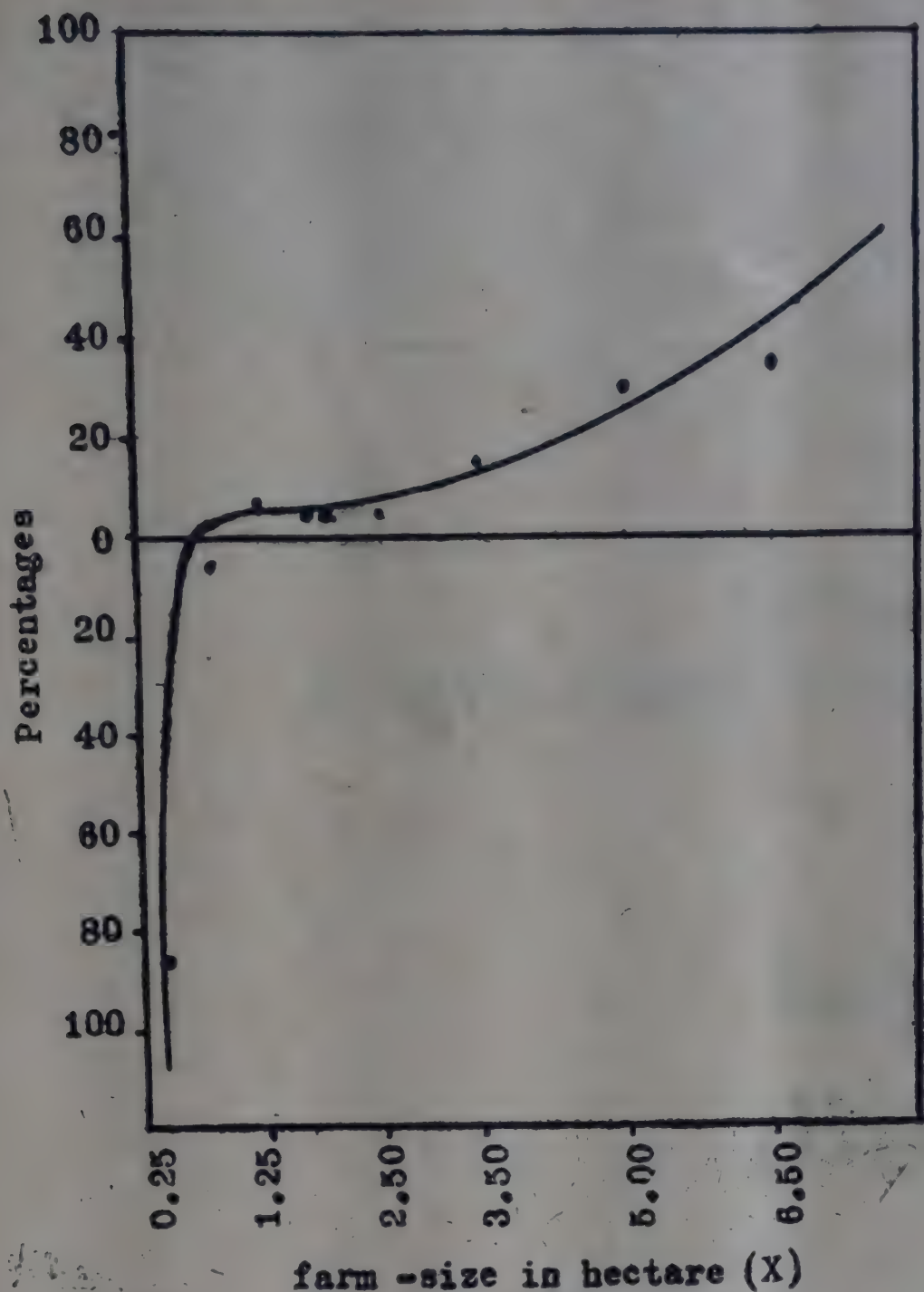
It is not surprising to note that in Figure 4, the curve  $g(x)$  reflects the angularities of the curves  $f_1(x)$  and  $f_2(x)$ ; particularly so as  $|\beta| > \alpha$  and  $|\gamma| > |\alpha|$ .

It may be noted that the function  $g(x)$  has the following first and second derivatives:

\* This concept is first used by Ashok Rudra. See, 'The Rate of Growth of Indian Economy', in 'Economic Development in South Asia', Kandy Conference Proceedings, edited by E A G Robinson and M Kidron, MacMillan, London, 1970.



FIGURE 4: FITTED CURVE OF  $g(X)$  AND THE OBSERVED POINTS OF THE RATIO  $S/R$  (%) PLOTTED AGAINST  $X$



$$(5) \quad \frac{dg(x)}{dx} = 0.1050 (1.4238x^{-1.32256})_1, \text{ for } x < 1.98 \text{ hectare}$$

$$(6) \quad \frac{dg(x)}{dx} = 0.0248x^{0.82702} > 0, \text{ for } x \geq 1.98 \text{ hectare}$$

$$(7) \quad \frac{d^2g(x)}{dx^2} = 0.2004x^{-2.909} (1 - 2.4106x^{-1.32256}), \text{ for } x < 1.98 \text{ hectare}$$

$$(8) \quad \frac{d^2g(x)}{dx^2} = 0.0205x^{-0.17298} > 0, \text{ for } x \geq 1.98 \text{ hectare}$$

The second derivative of  $g(x)$  for  $x < 1.98$  is just negative; that is to say, the decreasing rate of the increment of the function  $g(x)$  ceases at the point. It starts with negative value, rises sharply, though at a decreasing rate, until it crosses the axis of  $x$  at about  $x = 0.66$  hectare. If we consider that the sign and/or sign and magnitude of  $g(x)$  have/has one-to-one correspondence with the nature of sale and also with the degree of subsistence level we have a reasonable basis to divide the whole length of the curve of the function  $g(x)$  into the following three parts according to farm size in hectares ( $x$ ):

- a)  $0 < x \leq 0.66$
- b)  $0.66 < x < 1.98$
- c)  $x \geq 1.98$

Thus, it can be argued that holdings with farm-size 0.66 hectare or less, i.e., households potentially at or below the subsistence level, are obliged to sell their produce only out of distress.

So far as the farms in the second size group (Part-b) are concerned, the empirical finding is that the effect of farm size / on the marketable surplus function is practically nil, the farms belonging to this category having a maximum selling capacity of a little more than 5 per cent of their net farm receipts. A plausible explanation of this is that the households in this category show a strong tendency to increase the rate of their consumption as the size of farms increases. However, these farmers appear to be just above the subsistence level; they certainly do not enter the market as commercial sellers. The positive second order derivative of the function  $g(x)$  in the last size group as designated by part (c) shows that as the farm-size increases the proportion of marketable surplus too increases. This points to the commercial character of the holdings belonging to this size-group.

Now we see that the results (2) and (3) permit us to obtain an idea about the nature of dependence of  $S$  on  $R$  for positive values of  $S$ .

We have :

$$(9) \quad S = (R) = \frac{c}{a\gamma/\alpha} R^{3.0099}$$

where,  $c=23.60$ ,  $a=1731.30$

$$\alpha=0.909, \quad \gamma=2.73602$$

This result, unlike that of general findings (linear relationship) of Raj Krishna, implies that as the net receipt increases the positive value of net sale increases more than proportionately — in a roughly cubic fashion.

The functional representation of  $S$  on  $R$  obtained by eliminating  $x$  from  $S = f_2(x)$  and  $R = f_3(x)$  would have been mathematically justified if there were no error terms, i.e., if the mathematical representations were exact. However, considering that the functions  $f_2(x)$  and  $f_3(x)$  are only statistical fits for grouped values of  $x$ , the procedure is justified only to the extent of suggesting the nature of functional relation between  $S$  and  $R$ ; no more. To arrive at more reliable results, one has to consider disaggregate data and several explanatory variables. The choice of relevant explanatory variables itself requires to be explored and the nature of the pair-wise relationship between them requires to be studied. Some such explorations suggest to us that net receipts, total income, family size, yield rate of particular crop, some index of adoption of HYV, etc. could all affect the net mar-



ketable surplus. A simple regression analysis will not do because whatever results we get from such disaggregate fits would have to be consistent with aggregate fits that we have already carried out and presented for the variables S, R, S/R and X.

### Notes

- 1 Dharm Narain, "Distribution of the Marketed Surplus of Agricul-

tural Produce by Size-Level of Holding in India 1950-51". Institute of Economic Growth, Delhi. Occasional Paper 2.

- 2 Raj Krishna, 'The Marketable Surplus Function for a Subsistence Crop: An Analysis with Indian Data', *The Economic Weekly*, Annual Number, February 1965.
- 3 C H Hanumantha Rao, 'The Marketable Surplus Function for a Subsistence Crop: Comments', *The Economic Weekly*, April 17, 1965.

- 4 Manoranjan Majumdar, 'Marketable Surplus Function for a Subsistence Crop: Further Comments', *The Economic Weekly*, May 15, 1965.
- 5 Brahmanand Prasad, 'Marketable Surplus Function for a Subsistence Crop: Further Comments', *The Economic Weekly*, May 15, 1965.
- 6 Kalpana Bardhan, 'Price and Output Response of Marketed Surplus of Foodgrains: A Cross-Sectional Study of Some North Indian Villages', *American Journal of Agricultural Economics*, February 1970.

## NATION REGAINS SPIRIT OF ADVENTURE 1975-76

# New Deal For Youth

- Essential articles at controlled prices reach 10,490 hostels benefiting over 956,000 students.
- Supply of white printing paper at concessional rates brings down prices of textbooks and exercise books. 88,600 book-banks functioning in colleges and schools.
- 103 trades and 216 industries now under apprenticeship schemes.
- 18,800 seats added, bringing total to over 133,900 under apprenticeship schemes; 128,900 have been utilised, with 28,000 (over 20 per cent) going to Scheduled Castes, Scheduled Tribes and other backward classes.



# The Tata Iron and Steel Company Limited

## Statement of the Chairman, Mr J R D Tata

THE following is the statement of Mr J R D Tata, Chairman of the Tata Iron and Steel Company Limited, for the year 1975-76.

### A SET-BACK

The sharp set-back in profits suffered by your Company during the past year will no doubt have caused deep disappointment to the shareholders, particularly as they knew only of the high rate of production reported to them through the newspapers every quarter and were unaware of the steep continuing escalation in costs. They may therefore have expected that the results would not be very different from those of the previous year which recorded the highest profit, before and after tax, ever made by the Company.

2. Your Directors realise that the periodical publication of only production and sales figures does not provide an adequate indication of the progress of the Company during the year. If, therefore, it meets with the shareholders' approval, we shall henceforth issue a mid-year report on the performance of the Company and the conditions prevailing in the industry.

### ITS CAUSES

3. Although the Directors' Report has briefly indicated that the substantial decline in profit during the year was due to cost escalations beyond the control of the Company, compounded by a recession in demand, shareholders will, no doubt, expect from me a fuller understanding of the causes of this set-back.

4. In comparing the results of the two years, note should first be taken of the fact that, in the year 1974-75, the Company enjoyed for the full year the benefit of the substantial increase in prices sanctioned by Government in October 1973. That increase, which averaged Rs 245 per tonne in our case, resulted in a net accretion to the revenues of that year of about Rs 18 crores before tax and Rs 8 crores after tax.

### HIGH COSTS

5. In both Directors' Report and my Statement to the shareholders in July last year, it was pointed out that by 31st March 1975, the above increase in

prices had already been almost fully absorbed by cost escalations beyond management's control, mainly in respect of coal, power, fuel and wages. Since then and upto March 1976 works costs escalated further by about Rs 110 per tonne.

### LARGE INVENTORIES

6. To add to our difficulties, the recession in demand during the year resulted in a large increase in our steel inventories, the financing of which alone added more than Rs 3 crores to our interest burden, and for the first time since Independence necessitated the grant of rebates on certain slow-moving categories of steel compensated only partly by the larger tonnages sold through stock-yards at a higher price.

### LOW PRICES IN INDIA

7. I am sure shareholders need no reminder of the fact that year in and year out we have, both in my Chairman's Statements and in correspondence and discussions with Government, pointed out the gross inadequacy of the ex-works prices fixed by Government, and argued and pleaded for a realistic pricing policy which would enable this basic and vital industry, not only to maintain the efficiency of its plants but also to modernise them as they aged and became obsolete.

8. Mine have been cries in the wilderness except in 1973 when Government did grant temporary relief through a substantial price increase. Over the last thirty years or so, however, the steel industry has consistently been made to charge uneconomically low prices to steel users.

### COMPARED TO THOSE ABROAD

9. Let me illustrate the point by some simple examples of the comparative situation in India and elsewhere. The current price of structural sections allowed to Indian producers in both public and private sectors is today lower by about 65 per cent than in the UK, 64 per cent than in the USA, 51 per cent than in Japan, and 57 per cent than in Australia. In the case of bars and rods the gap is 40 per cent in comparison with the UK, 43 per

cent with the USA, 29 per cent with Japan and 38 per cent with Australia, while the ex-works price of plates in India is 56 per cent less than in the UK, 60 per cent less than in the USA, 50 per cent less than in Japan, and 54 per cent less than in Australia.

10. It will thus be seen that the Indian steel industry is compelled to sell its steel on the average at something like half the price earned by the steel industry in other countries, although the capital cost of putting up steel capacity in India is no lower than in those countries, and where higher wages are largely compensated by higher productivity.

11. By permanently denying to the Indian producers, through unrealistically low prices, the means to ensure the efficiency and continuous modernisation of their plants, Government make sure that, over the years, their costs of production will relentlessly rise as a result of the growing cost of maintaining old plants and of their inability to replace obsolete equipment and processes by modern and more efficient ones.

12. If, notwithstanding its age and lack of modern equipment, our plant continues to produce good steel at near full capacity, it is mainly because of the heavy capital expenditure we have incurred year after year, totalling nearly Rs 200 crores in the last ten years. The fact that a number of units of the plant broke all-time records during the past year shows that it is kept in first class operating condition, and is also a tribute to the skills, experience and hard work of our workers, technical staff and management.

### UNFAIR BURDEN

13. In the special economic circumstances of India, one could understand that Government, as part of their over-all campaign to control inflation, want to keep as low as possible the prices of basic materials or services, such as steel, cement and power, which strongly affect the cost of a host of other products. One can also appreciate Government's need for tax revenues and there could be no objection if the burden placed on the producer on both these counts were a fair and reasonable



one. It has however been far from being so in the case of the steel industry, and I submit that the lengths to which our Government have gone in this direction are self-defeating in the long run.

#### PRICES BELOW COST

14. Not only is the price at which we are compelled to sell our steel in India about half that of domestic prices abroad as pointed out earlier, but in a substantial number of our products, we are not allowed even to recover our works costs, leave alone their due proportion of overhead costs. It may come as a shock to shareholders to know that in the past year, 450,000 tonnes, or 36 per cent of our total domestic sales, were sold at a loss of Rs 8 crores, excluding depreciation and interest. With these added, the loss was approximately Rs 15 crores.

15. As if this were not enough, on top of the heavy sacrifices the industry is compelled to make by selling its products at uneconomically low prices, Government impose on it the additional burden of ever increasing and now disproportionately large excise duties, which on our own product-mix amount today to Rs 381 per tonne. Can there be any economic justification for such self-defeating policy which cripples the most vital of all industries in the country?

16. When Government built their own public sector plants, which now represent about 70 per cent of the total capacity of the major producers, I had hoped that as steelmakers themselves they would appreciate the imperative need of economic prices in order to ensure that their plants remain efficient and technologically modern over the years. This was a vain hope, for the public sector is also compelled today to sell some of its own products below cost.

17. What do we expect Government to do, faced as they are with economic problems of an admittedly formidable magnitude and multiplicity? We certainly do not ask that they should raise steel prices to the full level prevailing in other countries. We do expect them, however, to cease compelling the steel industry to act as a milch cow for the benefit of other industries and of Governments' own steel-consuming departments, either by raising prices to a reasonable extent or reducing excise duties, or both. We do not ask more than that the steel industry be allowed to earn

enough to meet its costs, pay moderate dividends, and put enough aside each year to plough back into plant improvements and modernisation.

18. We also expect, as was the case until 1963, that increase in costs beyond the industry's control, particularly those caused by Government's own actions, should be promptly met by an appropriate increase in ex-works prices.

19. I realise, of course, that selling prices to the consumer could not have been increased during the past year when a severe demand recession prevailed, but the object could have been achieved by a reduction of, or exemption from, part of the excessive excise duties charged on such basic products as iron and steel, which are the raw materials for many other industries.

#### DIVIDENDS

20. When an increase in steel prices was granted to the industry in October 1973, Government imposed on us the condition that the bulk of the increased revenues should be credited to a fund to be used only for capital expenditure on the plant. The amount so set aside was Rs 6.40 crores in 1974-75, and Rs 5.69 crores in 1975-76.

21. This condition, which lost its purpose from the time that cost increases exceeded the October 1973 price increase, has had the unfortunate and unintended consequence of compelling us to pay a part of the dividends out of reserves. This has this year brought us within the mischief of a new rule framed under the Companies Act, which limits dividends, any part of which is paid out of reserves, either to the average of the dividends of the previous five years or to 10 per cent of the paid-up capital, whichever is lower. Your Directors were thus debarred from distributing in dividends, including dividends on Preference shares, a total amount of more than Rs 4.83 crores. As a result, instead of the dividend of Rs 8.60 per share they intended to declare on Ordinary shares, they have been compelled to restrict it to Rs 7.75.

22. I deeply regret this further disappointment caused to the shareholders who had already suffered severe hardship from the dividend restriction of the past two years.

#### BONUS ISSUE

23. While the shareholders will, I am sure, approve of the proposal to capitalise Rs 12.86 crores of our reserves and

convert them into equity capital, they will no doubt wish to know why the Directors have preferred to give effect to it by raising the paid-up value of the existing Ordinary shares from Rs 75 to Rs 100 rather than adopting the more usual method of issuing one new share for every three held.

24. We have recommended the former method for a number of reasons:

- (i) It will be much simpler in that it will only require the over-stamping of every existing scrip instead of issuing new certificates to every shareholder.
- (ii) It will avoid the need to issue fractional coupons to owners of a single share which they would then have had either to sell, or to consolidate into one share by buying two more coupons. Instead, every holder of a single share will automatically receive an exactly proportionate bonus element of one-third of his shareholding without the trouble and expense of buying and consolidating coupons.
- (iii) It will be much cheaper because of the saving in paper, printing and postage.
- (iv) It will be quicker because arrangements can be made for the scrips to be over-stamped without delay on mere presentation.
- (v) It will bring the Ordinary shares of this largest of all the companies in the private sector in line with one of the two common and convenient share denominations normally in vogue in the country.
- (vi) Finally, it will avoid the need to issue a further 1.7 million shares which by adding to the outstanding floating stock could, in certain circumstances, act as a depressing factor on market values.

I trust, therefore, that shareholders will approve of the Directors' proposal.

#### PROSPECTS

25. Having read, I hope with patience and understanding, this long exposition of the past and present circumstances of the Company's set-back in the year under review, shareholders will no doubt want some reassurance as to our immediate prospects.

26. Considerable improvements in the supplies of coal, power, transport, and in industrial peace in the country, resulting from the various measures taken



by Government since the declaration of the emergency, have undoubtedly helped to increase or maintain production in all industries. In our case, however, with full production already achieved, with costs under tight control and inflation checked, prospects of any substantial improvement in our fortunes in the current year will depend on a number of favourable factors materialising: first and foremost, the end of the recession, helped, hopefully, by the impact of another favourable monsoon and the injection of substantially larger plan outlays; second, the long overdue increase in steel prices which such improvement will make possible, particularly on those categories the prices of which today do not even meet cash costs; and third, a further increase in exports.

27. With the world's economy emerging from the recession which plagued it during the past two years, the international demand for steel is bound to increase and with it the opportunities for exports from India. Shareholders will have noted that even in the past recessionary year our Company booked substantial orders which unfortunately could not be fully met owing to shipping difficulties. So long as domestic prices in India are kept at uneconomically low levels, I hope that we will be enabled to make up the loss of revenues thereby suffered by us through larger exports. I can assure shareholders that every effort will continue to be made to raise our profit earning potential at both the cost and revenue ends of our operations.

#### WHITE PAPER ON STEEL

28. The White Paper on the steel industry recently presented to Parliament by the Ministry of Steel and Mines is an important contribution to long-range economic forecasting. Considerable, and perhaps undue, interest has been aroused by the tentative estimate that India by the year 2000 might need a total capacity of 75 million tonnes of ingot steel against the current capacity of 12 million tonnes and production of 8 million tonnes. Given India's then population of 1000 million, this may not be an over-ambitious target in the light of her technological, natural and human resources, however staggering the magnitude of the capital investment that would be required. Taking into account not only the cost of constructing new plants and expanding existing ones but also that of the considerable infrastructure that must simultaneously be

built to supply them with raw materials, power, transport and the like, the total cost might be of the order of over 50,000 crores in terms of today's rupee, and, say, 85,000 crores at its average value over the next twenty-five years.

29. The key questions which would have to be answered would be: Could the steel industry be allowed to pre-empt such a large part of total investible resources over the competing claims of other pressing priorities? Would the steel-consuming sector of the economy be able to absorb such a flow of steel? Indeed, if so much capital is taken up by steel itself, will we have sufficient capital left for the growth of the steel-consuming industries themselves? Would it be wise to plan for substantial exports considering the low capital output ratio of steel when the export of products made of steel could earn so much more foreign exchange and steel-consuming industries generate so much more employment?

30. Doubtless, questions such as these will be examined in depth; for the time being, we may welcome this valuable exercise in long-term planning and the fact that it has drawn attention to the implications of large-scale and rapid expansion of steel capacity, and the need for increasing the internal cash flow of the industry, to which I have myself repeatedly referred in the past and again in this Statement.

#### CONCLUSION

31. I regret that I have, on this occasion, dwelt at such length on one subject, but I felt it my duty to provide shareholders with a full understanding of the operations of the past year, the reasons for the set-back suffered, the situation in the industry and the prospects for the immediate future. If my remarks sound pessimistic to some, that was certainly not my intention which was only to present a true and realistic picture.

32. I remain optimistic in regard to our Company's long-term future, subject only to Government policies, particularly in regard to steel prices. While I have regretted that the policies followed up to now have been self-defeating and have seriously impeded over the years the progress of our Company, I believe that the hard economic realities of this tremendous country of ours are better understood today than they have ever been before. Winds of change have been blowing around us, sweeping away

some of the old ideas and rigid formulae which have held back progress in the past. There is a new urge to achieve results and to avoid delays and unnecessarily complicated procedures. We might, perhaps, wish the process to be an even more rapid and profound one, but at least it is in the right direction. There is, finally, a new insistence on hard work and discipline and a widespread response to it which has already made industrial life easier and more productive. The economy of the country cannot but benefit from the present trends.

33. So far as your Company is concerned, it is in many ways in better shape than it has been for a long time. As I have said earlier, our plant, though old and in parts obsolete, is in excellent condition and capable of sustained production. The morale of our organisation remains high and has, if anything, been strengthened by the difficulties of the past year. Our financial position remains strong with a satisfactory debt/equity ratio.

34. I cannot prophesy what action Government will take, nor when it will be, in regard to steel prices to which I have devoted so much of my Statement, but I do know them to be fully aware of the urgent needs of the Industry in both sectors, and I can only hope that the right action will be taken soon, as market conditions improve.

35. It remains for me to express the Board's and, I am sure, the shareholders' sincere appreciation of the excellent performance of our workers, technicians and staff at all levels, at Jamshedpur, at the collieries, at the mines and elsewhere. As I have often said before, they remain our greatest asset and our best hope for the future.

*Note:* This does not purport to be a report of the proceedings of the Sixty-ninth Annual General Meeting.

J R D TATA  
Chairman

Bombay, 25th June, 1976.

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## Industrial Capacity and Production—IV

1974					1975		
Name of Industry	Accounting Units	No of Units	Installed Capacity	Annual Production	No of Units	Installed Capacity	Estimated (Annual Production)
CERAMICS							
Glazed Tiles	Tonnes	5	42,020	29,138	5	42,020	21,000
H T Insulators	—do—	7	21,510	15,754	7	25,200	16,500
Stoneware Pipes	—do—	13	76,464	45,956	13	76,464	45,500
L T Insulators	—do—	14	8,800	3,011	14	8,800	3,950
Stoneware Jars	—do—	8	8,546	6,376	8	8,546	7,000
Sanitaryware	—do—	9	18,170	16,688	9	20,630	21,500
Crockery	—do—	17	29,340	22,262	17	29,340	16,500
Synthetic Stones	Kg	1	21,600	11,419	1	21,600	8,900
Frits	Tonnes	1	4,020	1,743	1	4,020	1,350
Ceramic Colours	—do—	1	60	40	1	60	30
Enamelware	Th Pcs	7	30,030	21,257	7	30,030	14,450
CHEMICALS							
Oxygen Gas	Mn Cu Mts	64	85.167	60.558	76	92.844	60.00
Dissolved Acetylene	—do—	42	14.419	5.70	42	14.419	7.00
Calcium Carbide	Tonnes	5	73,700	70,200	6	88,550	75,000
Aluminium Fluoride	—do—	2	2,490	2,872	3	4,040	2,800
Synthetic Cryolite	—do—	5	5,490	4,641	6	6,990	4,900
Borax and Boric Acid	—do—	1	17,000	12,631	1	17,000	12,000
			3,000	2,219		3,000	2,000
Potassium Chloride	—do—	3	6,174	5,517	4	7,999	5,800
Red Phosphorous	—do—	1	480	242	2	900	600
Industrial Explosives	—do—	2	43,000	37,000	2	43,000	47,000
Calcined Petroleum							
Coke	—do—	3	126,000	94,179	3	1,26,000	98,476
Calcined Anthracite							
Coal	—do—	1	4,000	Nil	1	4,000	Nil
Formaldehyde	—do—	8	69,300	31,057	9	99,700	25,500
Carbon Black	—do—	2	71,700	51,284	2	71,700	41,552
SALT							
Salt	Thousand Tonnes	284	10,000.0	5912.9	230	10,000.00	7225.0
NEWSPRINT							
Newsprint	Tonnes	1	67,500	54,004	1	67,500	54,000
PAPER AND PAPER BOARD							
Paper and Paper Board	Lakh Tonnes	68	9.92	8.37	74	10.40	8.50
MISCELLANEOUS INDUSTRIES							
Starch	Tonnes	9	1,68,600	89,782	9	1,68,600	75,000
Liquid Glucose	—do—	7	80,000	24,413	7	80,000	23,000
Dextrose	—do—	2	30,600	10,037	2	30,600	11,500
Enzymes	—do—	1	7,300	500	1	7,300	300
Cigarettes	M Pcs	16	67,408	65,874	17	72,088	59,674
Guar Gum	Tonnes	5	26,100	16,309	5	26,100	17,075
Sorbitol and Mannitol	—do—	1	2,250	1,131	1	2,250	1,261
Filter Rods for Cigarettes	M Pcs	2	1,800	1,626	3	2,700	1,721
Solvent Extracted Oil	Tonnes	113	25,306	90,000	126	28,31,600	1,00,000
			lakh tonnes in terms of oilcakes/ rice bran	tonnes		in terms of oilcakes/ rice bran	

Source: Ministry of Industry and Civil Supplies, Annual Report, 1975-76.



*A letter to myself*



*From  
Bholanath Sen  
A Citizen of Calcutta*

*To  
Shri. Bholanath Sen  
Chairman,  
Calcutta Metropolitan  
Development Authority  
Calcutta*

My dear Chairman,

This is my first letter to you.

Calcutta is a city which I love because it has been kind to me and millions like me, though at times, I, like many others, have been rocked and shaken by doubts.

But not any more—even if one is an incorrigible cynic. The city has amply justified the confidence reposed in it by ordinary people like me and leaders like Shrimati Indira Gandhi.

I am so eloquent and confident not because the CMDA has built few bridges, a subway or widened twenty roads and even if they are better lighted. Not because water supply has increased by fifty per cent in the five years of CMDA's existence. Not because there is less waterlogging these days or because the metropolitan municipalities have received some attention. These are real improvements indeed, but what has benefited the people most?

Undoubtedly the slum improvement programme has made a tremendous difference in the quality of life of nearly 1.2 million slum dwellers and the remaining 1.1 million will also get these benefits shortly. Yet, are we going to stop there? Have you thought of what he is going to eat in an improved slum?

You will agree with me that the urban poor deserves a much better deal. The CMDA work should be directly aimed at benefiting the underprivileged, who have been deprived of the basic facilities so far. Is CMDA promoting the growth of worktowns where the urban poor, according to their trades and professions can get facilities without being exploited? If you can do it, you will justify the confidence of all of us and many more.

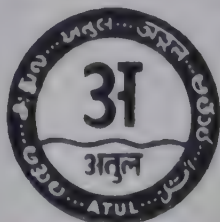
Irrespective of CMDA publicity campaigns, nobody with any sense will now talk of Calcutta being a lost or doomed city. That, however, is not enough. This city of ours, the most cosmopolitan and non-artificial city, which has sheltered the poor and given no quarter to vulgar affluence should take India to a new height. A better Calcutta is indeed necessary for it.

Yours sincerely,

*Bholanath Sen*



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**WEEKLY**

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**TINKERING WITH THE PLAN**

**FAMILY SIZE, INCOME AND LAND HOLDING**

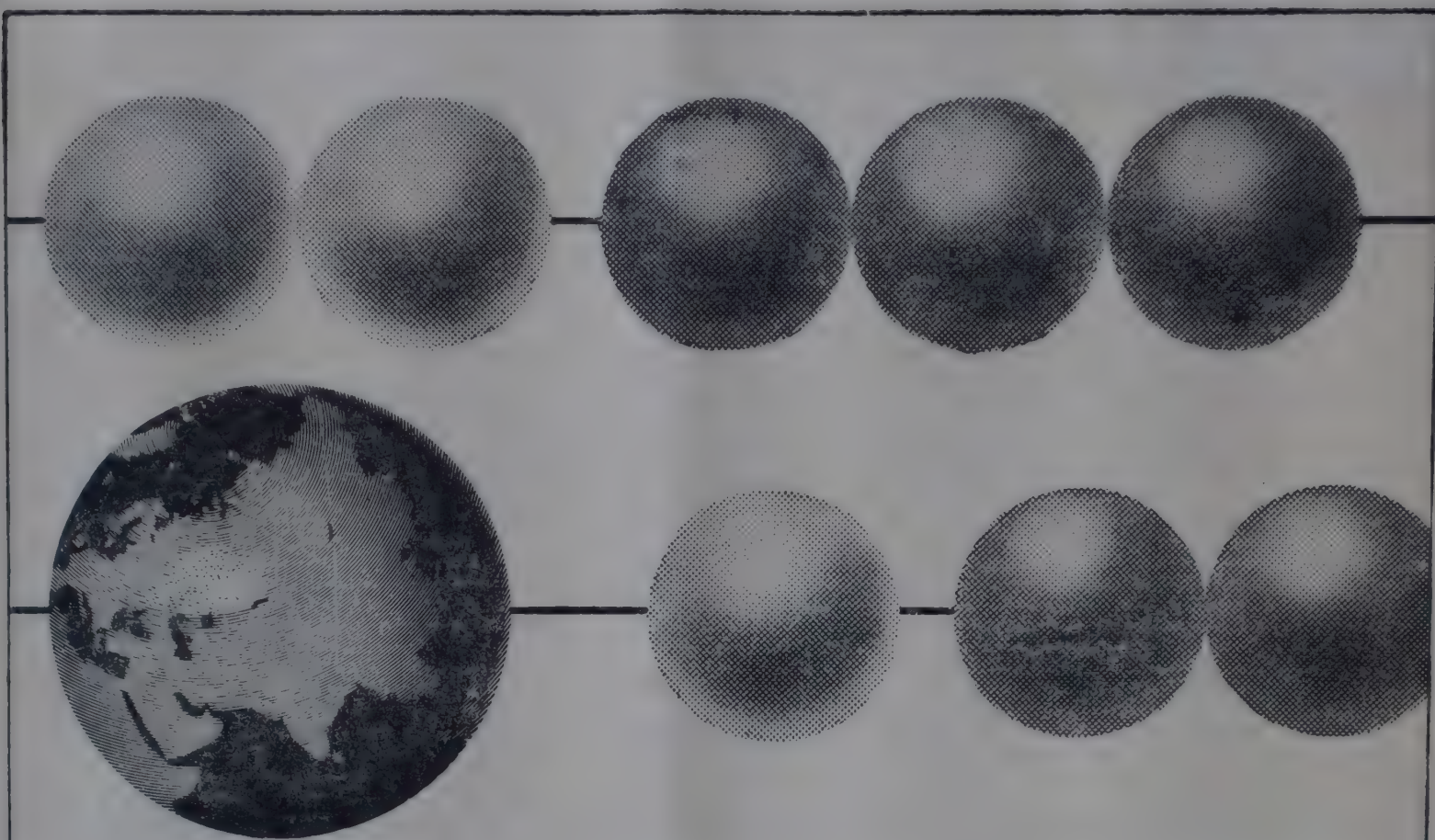
**MISUSE OF INDUSTRIAL DISPUTES ACT**

**BEHIND THE SYRIAN INVASION OF LEBANON**

**PRODUCTION RELATIONS IN INDIAN AGRICULTURE**

**POPULATION AND DEVELOPMENT**





## The world could not add up to much without India

India gave the world the number series. If numerals are called Arabic to this day, the credit goes to Mohammed Ibn Musa Al-Khowarismi—the Arab mathematician. He adapted an Arabic translation of the Brahma Gupta into a later work. The Latin version was published under the name De Numero Indorum—"concerning the Hindus' numbers".

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# ECONOMIC AND POLITICAL

# WEEKLY

Founder-Editor: Sachin Chaudhuri

Vol XI No 30 July 24, 1976

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## Hard Choices

THE progress of the Indian satellite programme is sufficient to illustrate that development of strategic technologies needs massive will and effort. As much as in nuclear technology, the line between military and peaceful applications of rocket and space technology shifts with interpretation. Rocket motor technology capable of handling satellite launches will also be a second base for development of ballistic missiles, and the techniques for earth resources surveying are substantially similar to those used in military spy satellites. Indeed, the visible tip of space application usually hides the larger iceberg of military reconnaissance missions: acquisition of space technologies therefore projects a country out of the regional balances fostered by *detente*. There can be little co-operation from either the US or the Soviet Union for this purpose.

Vikram Sarabhai's original plans for the satellite television experiment were probably based on the premise that one year (1975-76) of transmission using NASA's ATS-6 satellite would be followed closely by similar transmission through an Indian geo-stationary satellite. Given the constraints, external and internal, which apply, this was totally unrealistic. The Department of Space has now had to spread its satellite plans over several projects and many more years. The 350 kg Aryabhata demonstrated that some of the problems in satellite fabrication and telemetry could be handled by the Indian Scientific Satellite project team. But its high weight and negligible practical capability are demonstrative of the design constraints which had to accept components from any available source. For example, non-space-qualified electronic components of US origin were used (fortunately with success) along with bulky Soviet tape recorders, etc. The successor to Aryabhata is to be a simple satellite for earth observations (SEO) of very limited capability to survey agricultural, forest and water resources. Both these satellite orbits are, of course, determined by Soviet choice and this further constrains their utility.

While neither Aryabhata nor SEO will be of appreciable technological significance, the gap between even these satellites and those to be orbited by India's satellite launch vehicle (SLV-3) is significant. The first two orbital flights of SLV-3 will carry 'technology proving' payloads of 40 kg, an order of magnitude smaller than potentially useful satellites. Larger satellites will have to await the development of high thrust liquid fuel rockets for which French collaboration has just begun. Little can be expected of this for 10 years or so.

It is this which has led the Department of Space to examine alternative ways of building and launching geo-stationary communication satellites. If the European Space Agency accepts the Indian proposal, a communication satellite could be launched in one of the proving flights of ESA's Ariane rocket. The satellite, which will have to be fabricated abroad, will itself cost around Rs 9 crores. The alternative is to have the job done entirely by the Russians. But their prices for equipment have always been high, especially when political considerations leave them effectively as monopoly suppliers, and the costs of the satellite and its launch are unlikely to be less than Rs 30-40 crores.

All this leaves the Department of Space with hard choices. Limited experiments, such as SITE or the proposed use of the French-German Symphonie satellite, are not substitutes for technology development. And yet the options are few. Working under the Soviet umbrella will increase the slide towards the heavily circumscribed role that that country sees for the Indian space programme. This would hardly be palatable to any country seeking a position of regional dominance and still less to one eager to demonstrate an economic renaissance through high visibility symbols. On the other hand, the Europeans use a technology that is dominated by US firms and a major part of ESA's plans mesh in with NASA's spacelab project. Their efforts to establish their own industrial base for this purpose are in lower key and are prompted mainly by the French. While they may be willing to share the risk of the early Ariane rocket launches with India, they have little to gain by offering any facilities that could have military use. Unfortunately for this country, that includes rocket technology. Much will therefore have to be made of the French aid in developing liquid fuel rockets, just as the future of the strategic breeder reactor programme is also dependent on the French.

In the meantime, it cannot escape attention that, as a luxury, space technology must be sustained by the surpluses of a growing economy, and, as a utility, by the surpluses it generates. Even for strategic purposes, it can have no other place in the long term.



## The Economy

### Growth Potential Goes Abegging

THE expansion of money supply with the public in the current financial year so far deserves to be noted. Data available from the Reserve Bank upto July 9 show that money supply has expanded by as much as Rs 1,175 crores or 9.3 per cent since end-March, against an increase of only Rs 742 crores or 6.3 per cent in the comparable period of the last financial year. Particularly disquieting is the expansion in the currency component of money supply with the public, which has risen by as much as Rs 690 crores against Rs 388 crores last year. During the whole of 1975-76, currency had expanded by Rs 350 crores and money supply by Rs 1,130 crores; the expansion in both was thus less than what has already occurred this year in a period of a little over three months. In the twelve-month period ended July 9, money supply expanded by 12.6 per cent or Rs 1,545 crores, compared with an increase of only 6.4 per cent or Rs 745 crores in the preceding twelve months. The expansion in currency was Rs 660 crores against only Rs 92 crores in the preceding twelve months.

Apart from the sharp rise in the currency component, another distinctive feature of the monetary expansion in the current financial year is the source of the expansion. The government's reliance on the banking system this year has been unusually small. On the other hand, expansion in bank credit to the commercial sector has been exceptionally large. The expansion in net bank credit to government between end-March to July 9 was Rs 357 crores against Rs 1,153 crores last year. Reserve Bank's net credit to government actually showed a contraction of Rs 239 crores compared to an expansion of as much as Rs 667 crores during the comparable period of last year. In the twelve-month period ending July 9, the expansion in net bank credit to government was nil, as contrasted with an expansion of as much as Rs 1,416 crores in the preceding year. Similarly, Reserve Bank's net credit to the government declined by Rs 663 crores against an increase of Rs 1,037 crores in the preceding twelve-month period.

A part of the explanation for reduced credit to government this year is to be found in the transfer of the food procurement and fertiliser import burdens entirely to the commercial sector.

However, last year only about Rs 500 crores had gone to finance food procurement and fertiliser import. Thus this factor can explain only a part of the difference in the sources of monetary expansion between this year and last year. The government's revenue and capital receipts, it is possible, are larger than last year, but if the claims of increase in Plan outlays and total developmental spending are to be believed, the government's expenditures should have risen even faster. Evidently it has not, which reflects the impact of the virtual Plan holiday which the country has had since the publication of the draft Fifth Plan. As a result, now when government revenues are relatively buoyant, there are not enough development projects ready to be implemented. This is the price of the government's anti-inflationary measures of the last two years.

The government's foodgrain procurement policies and the methods of financing foodgrain stocks have, it is evident, adversely affected the developmental effort. Because food stocks have been financed by commercial bank credit supported by refinance from the Reserve Bank, the government has been reluctant to increase its own reliance on the banking system. As a result, development outlays have been held in check. The large food stocks with the government, instead of being used as a wage fund on the strength of which to plan for larger investment and employment generation, thus appear to have become a damper on development. The irony of this development is sharpened by the fact that the foodgrain stocks have been acquired at, relatively speaking, very favourable prices for the surplus farmers as a result of the procurement prices of scarcity years having been converted into support prices.

Bank credit to the commercial sector increased by Rs 858 crores in the first quarter of this year compared to an increase of only Rs 16 crores last year. And in the twelve months ended July 9, bank credit to the commercial sector expanded by a whopping Rs 3,036 crores against Rs 1,225 crores in the previous twelve-month period. Credit for food procurement accounts for the bulk of the increase — Rs 766 crores out of Rs 858 crores. Total outstanding food credit now stands at Rs 2,283 crores, of which a substantial part is financed by the Reserve Bank. Reserve Bank's advances to commercial banks are as much as Rs 1,104 crores, having gone up by Rs 306 crores so far this year as against a

decline of Rs 310 crores in the corresponding period of last year.

The rise in Reserve Bank credit is responsible for the exceptionally large currency expansion. The expansion in food procurement credit also accounts for the rise in currency. The leakage of cash is obviously substantial in food credit — more than in other types of commercial credit. This is a potential threat to monetary stability.

Another significant aspect of the monetary expansion in the current financial year so far relates to the vast increase in the foreign exchange assets of the banking system. Because of the drop in the premium in the unofficial money markets, remittances through official channels have increased. The extent of the increase is an index of the vast drain of foreign exchange in the past due to smuggling and unofficial sales and purchases of foreign currencies and the financing of smuggling activity by foreign exchange acquired, *inter alia*, through under-invoicing of exports and over-invoicing of imports. Paradoxically, just when the country has begun to get these remittances through official channels, the government seems to have no investment programme to make use of the foreign exchange receipts. As a result, during the past one year, nearly Rs 1,000 crores worth of foreign exchange has been added to the reserves kept with the Reserve Bank. The large idle foreign exchange resources are certainly a strange phenomenon in an economy crying out for investment, increased production and expansion of employment. It has been argued that the foreign exchange reserves, like the foodgrain stocks, are intended to serve as a cushion against a potential threat on the price front. This plea shows how much official thinking has been conditioned by the short-term considerations of an anti-inflationary stance, to the neglect of the long-term tasks of increasing investment, output and employment.

The last aspect of the monetary expansion which calls for attention is the role of the compulsory deposits impounded with the Reserve Bank and included in the Reserve Bank's net non-monetary liabilities. Probably because of reduced accruals and repayment of these deposits, the net non-monetary liabilities of Reserve Bank have registered a decline of about Rs 100 crores against an expansion of as much as Rs 340 crores in the corresponding quarter of last year. One of the criticisms of the impounding of wages and dearness allowances, apart



from the inequitable treatment of wage and other incomes, was that when repayments become due, the inflationary implications would be serious. This is precisely what is happening now.

## Judiciary

### Far-Reaching Suggestions

THE Union Law Minister H R Gokhale has reportedly presented a 21-page note to the Swaran Singh Committee. Along with suggestions on the judiciary, the note is said to contain the strong recommendation that Article 77(3) of the Constitution be amended to make it clear that the rules which the President makes for the transaction of the business of the government shall not be disclosed to the courts.

Among the Law Minister's other suggestions is that the Constitution be so amended that Supreme Court's judgment in the *habeas corpus* case is given constitutional sanction. The majority judgment in this case was delivered by four judges with one dissenting. It overruled seven High Courts and is contrary to earlier precedents. It is open to review by a larger bench of the Supreme Court. Several rulings of importance have been so reviewed. The Law Minister's suggestion would rule out such review.

The Supreme Court ruled that once the constitutional guarantee of personal liberty (Article 21) is suspended a detention cannot be challenged even on the ground of violation of MISA itself or mala fides. Earlier the court had restricted the ban to the enforcement of the suspended fundamental right, not to enforcement of the statute. In any case, whether challenging, say, a censorship order as violative of the DIR is tantamount to enforcement of the fundamental right of freedom of speech (Article 19) is still an open question. The Law Minister suggests, however, that all rights which were enforceable immediately before the commencement of the Constitution and which had been embodied in the Constitution as fundamental rights shall be enforced "subject to the provisions of the Constitution and not otherwise". In other words, if they are suspended, no executive action can be challenged, even if it violates the statute under which it is taken, if it could be related to the suspended fundamental right. Before the Constitution and after it a citizen could without enforcing a fun-

damental right challenge executive action as being in breach of law. The Law Minister's suggestion would remove this right.

To empower the Supreme Court to exercise administrative control over the High Courts and to withdraw for consideration by itself cases under consideration of a High Court is to reduce the High Court's authority. The Swaran Singh Committee has already suggested that challenges to the validity of law on the ground of violation of the Constitution can be decided only by the Supreme Court. The Law Minister's note goes a step further. Apart from curtailing the High Courts' jurisdiction *vis-a-vis* the Supreme Court, it curbs their power *vis-a-vis* the state governments in regard to the transfer and promotion of judges of the subordinate judiciary. If these suggestions are implemented, the High Courts will emerge with their wings clipped.

## Second Hooghly Bridge

### Surfeit of Foreign 'Expertise'

*A Correspondent writes:*

WHO is in charge of planning in India? Apparently it is the Planning Commission, but in reality very often it is the foreign experts supplied by international corporations through private or government channels. We can see the marks of foreign "expertise" in every aspect of the planning of many big projects. Multipurpose river valley projects, atomic power plants, flood control programmes, agricultural research, geological surveys of mineral and oil resources, town planning, railway expansion, road development, bridge construction — everywhere foreign advice has been liberally availed of, even when it has been detrimental to our interests. The latest instance is the much-talked-of Second Hooghly Bridge.

The feasibility report on the Second Hooghly Bridge was prepared in 1962 by CMPO — a creation of the Ford

Foundation — and the CMPO's recommendations were approved by the traffic experts of the Ford Foundation. The World Bank was ready to meet half of the total expenditure on the bridge. Then came the question of a detailed techno-economic survey, and naturally, Rendel, Palmer and Triton of London were invited to undertake it. The London firm suggested that the new bridge be located quite close to the present Howrah Bridge, with a further recommendation that it be as high as the 19-storeyed Tata Centre in Chowringhee. Why so high? Because ocean-going vessels would be able to move freely and utilise the almost damaged jetty on both banks of the Hooghly, right upto the present Howrah Bridge. In fact, however, these jettys will be of no use after Haldia is completed.

After the World Bank's green signal, a Hooghly River Bridge Commission (HRBC), under the direct control of the state government, was formed to supervise the project. And yet, with CMPO, Ford Foundation, World Bank, Rendel, Palmer and Triton and HRBC already in the picture, came still another foreign firm, Freeman, Fox and Patterson of London. Indian engineers being considered incapable of designing the bridge, Freeman, Fox and Patterson got the job. This firm of course has a reputation. Two bridges, one at Melbourne and another at Wales, built after the designs of Freeman, Fox and Patterson are alleged to have broken down at the time of construction. At Melbourne, 35 workmen are said to have died and more than 100 injured in the disaster. A Royal Commission, after thorough investigation, held Freeman, Fox and Patterson responsible for the faulty design of the bridge. Further, Arkiens Bridge in Scotland and Nangoa Bridge in West Africa, designed by the same firm, were allegedly damaged soon after their completion. None of this, however, came in the way of the firm being given the job of designing the Second Hooghly Bridge. And for

## Special Number 1976

The mid-year Special Number of *Economic and Political Weekly* will be published in the third week of August. It will be priced Rs 10, but will be supplied to subscribers at no extra cost.

In view of the Special Number there will be no weekly issues on July 31 and August 7 and 14.



these "surveys" and "designs" three foreign firms — Rendel, Palmer and Triton, Fox, Freeman and Patterson, and LUNA of Germany — will receive over Rs 1 crore in foreign exchange as fees. LUNA will advise Kanoria — responsible for the actual construction of the bridge — and the other two are advisers to the Port Commission and the HRBC. By the time the bridge is completed, the Ganga might be even less navigable than it is at present (given the yet unresolved problem of Farakka) and the bulk carriers for whose benefit the bridge has been designed so high might not be able to reach Calcutta port.

### Clippings

The Union Deputy Minister for Finance, Mrs Sushila Rohatgi, said at Calcutta airport on Saturday that the value of the rupee had appreciated in the world and its purchasing power increased.

*The Statesman*, July 18.

Rupee weakened in terms of US dollar, DM, Swiss Franc and other select European currencies during the week ended July 16.

*The Economic Times*, July 19.

The proposal for India and the Soviet Union collaborating in setting up industrial projects in third countries is now taking concrete shape.

*Financial Express*, July 19.

As part of its four-fold strategy to boost exports, the government is considering production co-operation with East European countries to break the stalemate in trade.

*Financial Express*, July 21.

The South Asian section of the Democratic Party platform concedes that "India has now achieved a considerable degree of hegemony over the sub-continent" and suggests that "future American policy should accept this fact".

*The Times of India*, July 21.

The Reserve Bank has decided to relax the conditions in respect of export credit.

*Financial Express*, July 20.

Cash assistance for export products will now be available for a period of three years. This policy decision was announced by the Commerce Minister, Mr D P Chattopadhyaya, while inaugurating a seminar on export and production perspectives organised by the Federation of Indian Chambers of Commerce and Industry here [New Delhi] today. ... The Commerce Minister assured the industry that "if there is a change, it will only be upwards".

*The Economic Times*, July 21.

The Planning Commission has nearly completed official level discussions with

the states on their resources position and finalised the draft Fifth Five-Year Plan document.... Indications are that the targets may have to be scaled down in view of the resources constraint.

*The Economic Times*, July 20.

The Planning Commission has slashed the Railway's Fifth Plan target from 300 mn tons in terms of originating freight traffic to 216 mn tons.

*Financial Express*, July 20.

The proposals of maritime states to develop minor ports are reported to have gone awry [following] the decision to discontinue Central assistance for this sector during the Fifth Plan.

*The Hindu* July 19.

The educational objectives and programmes of the Fifth Plan have been "very adversely affected" due to the inadequate financial provisions.

*The Hindu*, July 19.

The West Bengal government has warned jute mill managements that it will not tolerate the phenomenon of mills remaining closed in the state. The government also warned that the nine mills which are now closed should reopen immediately.

*Business Standard*, July 20.

The Indian Jute Mills Association (IJMA) has cautioned the Union Commerce Ministry that, besides the ten jute mills already closed, "a few more may be forced to stop work" within a month, unless immediate measures are taken to dispose of unsold stocks.

*The Statesman*, July 22.

Mr C Rajeswara Rao, General Secretary of the Communist Party of India, told Soviet readers today that reaction's bid to seize power had been thwarted, thanks to the unity of the Indian National Congress, the Communist Party and the other democratic forces. ... "Thanks to firm measures, ranging from the proclamation of the emergency to the arrest of a few active leaders of the conspiracy, the forces of reaction were defeated."

*The Hindustan Times*, July 17.

AITUC Secretary Y D Sharma ... said that during the emergency the process of collective bargaining had suffered a setback.

*Patriot*, July 21.

A recent study has revealed that more than 50 per cent of fatal accidents in coal mines have been due to the collapse of roof and sides.

*The Statesman*, July 19.

Four miners were killed and another miner was seriously hurt when they were trapped under a huge sheet of rock (sandstone) near Mancherial in Adilabad district on July 18, police said here today. The roof caved in when they were working 74 metres below the ground level.

*Indian Express*, July 22.

The production of passenger cars which was in disarray till a couple of months ago, faced with uncertainty of

sales, is steadily looking up over the last two months.

*The Economic Times*, July 17.

The Capital's tipplers beat the searing heat this summer by drinking so much beer that breweries had a hard time satiating their thirst. They drank 21 lakh bottles of beer between May 15 and the end of June — 3 times more than during the same period last year. People found it cheap to drink beer because of the slash in prices by the Delhi Administration.

*The Hindustan Times*, July 22.

Electronically operated automatic door-closers are proposed to be installed at Bombay airport in line with the modern international airports.

*The Times of India*, July 18.

Only three per cent pay from their own pockets to travel by air ... The major percentage — 65 per cent — is on expense account ...

*Indian Express*, July 15.

Indian Ministers and other senior officials visiting Britain on government work have of late been dismayed to find themselves booked into second and third class hotels in London and other cities by the Indian High Commission. ... Over the past few weeks there have been many VIPs either passing or visiting London and almost all seem unhappy over the type of accommodation reserved for them.

*The Statesman*, July 17.

A review of administrative measures taken in different states for implementation of the urban land ceiling law will be undertaken by the Central Co-ordination Committee set up for the purpose at its meeting on Monday in Jaipur ... Several state governments have reported that they had taken a number of steps in relation to implementation of the Act. These include the appointment of a competent authority, printing of various forms and making them available to the public at a nominal price and the processing of applications for permission to sell vacant lands.

*The Times of India*, July 18.

Dr Zakaria [Maharashtra Revenue Minister] told Mr N R Mate (Cong) that 11 landowners in Pune, whose land fell in the urban ceiling act, had submitted plans to the government for building houses for low income group people so that they could get exemption from the ceiling limit.

*The Times of India*, July 16.

The Cow Protection Committee will shortly submit its interim report to the government suggesting appropriate steps for protection of cows, bulls and bullocks in terms of the directive principles of state policy ... The Committee was appointed in 1967 ... and has been considering the question of cow protection in its entirety, including the constitutional, legal and economic aspects.

*The Hindustan Times*, July 16.



## Explorations into By-products

Hansavivek

**GUJARAT STATE FERTILIZERS COMPANY** has turned out impressive results for the nine months ended December 1975, with both sales and gross profit markedly higher as compared to the preceding 12 months. Net profit however has been lower, since a substantial portion of the profit will now be subject to income-tax for which necessary provision has been made. Dividend has been stepped up from 12 per cent to 15 per cent and is covered more than five times by earnings. Production of fertilisers and caprolactum was maintained at satisfactory levels in spite of failure of reactor liner in urea-1 plant and disturbed operating conditions in the ammonium sulphate recovery section of the caprolactum plant. Under a programme of replacement and modification of fertiliser plants, a new urea reactor was installed last year and the reformer tubes of ammonia-1 plant will be replaced during the current year. Steps have also been initiated for debottlenecking of the phosphoric acid plant to increase production of phosphoric acid and consequently of phosphatic fertilisers. The management has decided to establish purge gas recovery facility at a cost of Rs 8.28 crores, for which a contract has been concluded with a West German firm. Foreign exchange for the project will come out of loan assistance from the World Bank to the government of India. The project envisages production of argon gas required for industrial purposes and will also provide some saving in naphtha and gas consumption in the manufacture of ammonia. The company has been issued letters of intent for setting up manufacturing facilities for 5,000 tonnes of melamine per annum and fluorine recovery. Negotiations are under way for selection of the process and foreign contractor for melamine. The fluorine recovery project will, while preventing pollution of atmosphere by the fluorine that escapes into air, enable fluorine to be recovered, which will be converted into valuable products like cryolite for aluminium fluoride. A letter of intent has also been received for the ABS/SAN project, which is proposed to be implemented with the company's own knowhow, being developed by the research department. A new company under the name 'Gujarat Narmada

Valley Fertilisers Company' has been incorporated to undertake the new fertiliser project of 1,350 tonnes per day ammonia plant and 1,600 tonnes per day urea plant. Government of Gujarat and GSFC will be the promoters and will contribute 26 per cent and 25 per cent, respectively, to the share capital of this new company. The new fertiliser project will be set up near Broach in Gujarat.

**GOODYEAR INDIA's** directors complain that the tyre industry continues to suffer in the current year, as it did in 1975, from the recession in the automotive industry. Demand for passenger car tyre continues to be down by about 50 per cent, and for other tyres the market is still sluggish. They add, however, that there are hopeful signs of recovery. The output of the company's factory at Ballabgarh in Haryana increased by 3.5 per cent in 1975 in terms of tonnage despite severe power

restrictions in the first two months of the year. The accounts show over 11 per cent rise in sales, followed by an almost similar increase in gross profit. Net profit is lower compared to last year's, on account of enhanced provision for taxation. Dividend is maintained at 12 per cent and is covered nearly 2.4 times against 2.7 times previously. In addition, the directors have proposed a gift of shares on a two-for-five basis. This will involve capitalisation of Rs 17 lakhs standing to the credit of share premium account and Rs 197 lakhs out of the general reserve. No provision has been made for liability of retirement gratuities, estimated at Rs 24 lakhs. The company's earnings in foreign exchange were a bare Rs 2,55,473, whereas it consumed imported raw materials, stores, spare parts and components worth about Rs 2.06 crores, remitted over Rs 15 lakhs in foreign currency on account of dividends, and spent another Rs 13,33,938 in foreign currency by way of technical fees, commission on exports, interest and travel. The rupee liability in respect of long-term loans payable in several foreign currencies,

### The Week's Companies

(Rs in Lakhs)

	Guj Fertilisers		Goodyear	
	Latest Year 31-12-75	Last Year 31-3-75	Latest Year 31-12-75	Last Year 31-12-74
Paid-up capital	1500	1200	534	534
Reserves	4948	4417	758	809
Borrowings	2037	2224	409	382
of which Term borrowings	1739	2113	300	350
Gross fixed assets	10555	9906	1688	1649
Net fixed assets	4870	5498	629	722
Investments	5	3	—	—
Current liabilities	2581	1374	797	476
Current assets	5979	3708	1863	1464
Stocks	2139	2048	891	740
Book debts	794	784	954	562
Net sales	6916	6686	4457	4006
Other income	145	78	40	83
Raw material costs	1833	2367	2934	2415
Wages	324	378	351	319
Interest	125	183	62	75
Gross profit (+)/loss(—)	2899	2585	503	450
Depreciation provision	781	933	137	151
Tax provision	1151	—	213	111
Net profit (+)/loss(—)	967	1652	153	188
Development rebate provision	14	532	2	16
Transfer to reserves	752	984	87	108
Dividend				
Amount	P 21 E 180	28 108	P — E 64	— 64
Rate (per cent)	P 9.3 E 15	9.3 12	P — E 12	— 12
Cover (times)	5.17	10.11	2.36	2.69
Ratios (per cent)				
Gross profit/sales	41.92	38.66	11.06	11.23
Net profit/capital employed	11.39	21.07	8.93	10.89
Inventories/sales	30.93	30.63	20.00	18.47
Wages/sales	4.68	5.65	7.87	7.96



has been adjusted on the basis of RBI's spot exchange rates as on the last working day of the year. As a result, rupee liability on these loans has been increased by Rs 21 lakhs and a corresponding amount added to value of fixed assets.

**UNIT TRUST OF INDIA** has declared a dividend of 8.75 per cent for the year ended June 1976 as against 8.6 per cent paid for the previous year. This is the highest payment so far in UTI's career and in fact it could have been still higher, but for the fact that some of the companies postponed declaration of dividends before the close of the Trust's financial year. Gross yield to the unit-holder will be much higher as dividend income from units enjoys tax exemption up to Rs 5,000. The UTI's financial results are encouraging. According to a preliminary statement, Trust income was Rs 15.56 crores as compared to Rs 13.6 crores for the previous year. Total sales of units under the 1964 scheme amounted to Rs 20.7 crores under 28,734 applications, as against Rs 16.7 crores under 36,259 applications last year, while repurchases were almost halved at Rs 10.9 crores against Rs 20.4 crores. As at the year-end, units sold and outstanding amounted to Rs 157.7 crores under about 6 lakhs accounts. The total amount reinvested under the reinvestment plan was a shade better at Rs 1.36 crores against Rs 1.35 crores and sale of units under children's gift plan was slightly lower at Rs 40 lakhs under 1,992 applications as against Rs 41 lakhs under 1,767 applications last year. During 1975-76, 2,954 members joined the unit linked insurance plan for a total target amount of Rs 2.67 crores as against 2,043 members for target amount of Rs 1.63 crores previously. Total investible funds as on June 30 last amounted to Rs 184.68 crores, of which Rs 162.90 crores represented investments. The Trust sanctioned financial assistance of Rs 5.6 crores to companies as compared to Rs 4.8 crores in 1974-75. Total amount underwritten by the Trust in respect of public issues of shares and debentures and subscriptions to privately placed debentures amounted to Rs 3.8 crores as compared with Rs 5 crores previously. Sale of the new capital units, introduced from January 1 last, aggregated Rs 7.47 crores till they were suspended from April 22. The Trust has declared a maiden dividend of 3 per cent per annum in respect of these units.

**GAJRA BEVEL GEARS**, a project promoted by Gajra Gears, is setting up a plant at Dewas (MP), for the manufacture of various types of differential gear parts for heavy vehicles. A licence has been secured to manufacture 750 tonnes of ring gears and pinions and 195 tonnes of differential gear kits per annum. The main gear cutting equipment and testing equipment will be supplied by Gleason Works, USA, the world renowned manufacturers of hypoid and spiral bevel

gears. Hindustan Machine Tools will supply most of the indigenous machine tools. Necessary arrangements for all infrastructure facilities like power and water have been made. The project is estimated to cost Rs 480 lakhs and is proposed to be financed by equity capital of Rs 190 lakhs and term loans from public financial institutions to the tune of Rs 290 lakhs. All the necessary arrangements are well under way and the company expects to enter the capital market shortly.

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The posts carry the benefit of Contributory Provident Fund. Higher initial start in the case of exceptionally well-qualified and experienced candidates can be considered. Those in service must forward their applications through proper channel.

Applications giving full name of candidates, age, qualifications, experience etc. together with attested copies of mark-sheets, certificates and testimonials must reach the Hon. Director of the Centre on or before August 14, 1976.

Persons who have sent applications in response to the Centre's advertisement last year need not apply again; their applications will be considered along with the new applications.

No travelling or any other allowance will be admissible to candidates called for interview.



NEW DELHI

## Tinkering with Fifth Plan

B M

AFTER a prolonged interval, there is some revival of activity in Yojana Bhavan. The Prime Minister has at last been persuaded to show some interest in the labours of the planners. She has agreed to a full meeting of the Planning Commission in August under her chairmanship. This is a much-needed morale booster for those working in Yojana Bhavan. The exact date for the meeting is, however, yet to be fixed. Meanwhile, the emergence of fresh pressure on prices has created fresh doubts and uncertainty. But it is fervently hoped among the planners that the price problem will be effectively tackled in the prevailing overall economic and political environment and will not be allowed to once again raise fresh obstacles in the way of their altogether belated effort to give final shape to the Fifth Plan.

The aim of the planners is, in any case, rather modest. They no longer pretend that they can perform anything like a leadership role in economic policy-making. They were pushed to the sidelines in the last three years while the government struggled to deal with a critical economic situation. The draft of the Fifth Plan was outdated by the time it was ready and has been of no operational significance all this time. But with inflation having been brought under some control and two bumper agricultural crops in succession, it is now considered both desirable and feasible to revive the Fifth Plan. The prominence given in this year's budget to the alleged step-up in the Plan outlay was in the nature of a green signal to the planners. But it appears to have been also hinted to them that their task is a limited one. It is merely one of updating the base and target figures of the Plan and making the consequential readjustment of financial allocations in consultation with the Union Ministries and the state governments.

However, before the planners can be in a position to translate into an integrated and coherent scheme of mobilisation and deployment of resources to achieve set targets in terms of the overall rate of growth as well as its sectoral break-up, the basic objectives must be laid down and policy parameters clearly defined. The full meet-

ing of the Planning Commission next month could be an opportunity for the Prime Minister to spell out the guidelines for the planners. There is little evidence to show that the planners were taken into confidence when important economic policy initiatives, such as have been embodied in the current year's budget, were taken — in the past one year in particular. It may be assumed, however, that the planners are expected to take into account the new trends in policy in their work on finalising the Fifth Plan. These trends are clearly in conflict with some of the fundamental premises of the draft Fifth Plan. The question is whether the draft Plan — at least the chapters dealing with basic policy issues — will be explicitly revised on the new lines. There is a great deal of ambivalence here. The planners do not seem inclined to make such revisions in the draft. Their entire attention is devoted to revising the targets and outlays. This is probably regarded as a good way of sidestepping the difficult problems which the planners are facing.

The Planning Commission has completed its discussions with the Union Ministries in connection with the revision of the Plan. The discussions with the state governments are to be completed this month. The Commission, in the light of these discussions, proposes to present a paper purporting to be a mid-term appraisal of the Fifth Plan and to project revised targets on the basis of the present reassessment of the resources position. This will obviate the need of rewriting the draft Plan.

The total outlay in the first three years of the Plan adds up to about Rs 19,000 crores. This is just about half of the total envisaged for the five-year period. Considering the fact that the Plan target for additional resource mobilisation (Rs 6,850 crores) has been fulfilled, it should not be difficult to provide for the remaining 50 per cent of the Plan outlay in the coming two years. The Plan will thus have been implemented as far as the financial side is concerned. But the physical content will be nowhere near achievement. The public sector financial outlay will have to be greatly enlarged to reach even the core sector physical targets.

The question, however, is whether the political leadership is willing to go for additional resource mobilisation on the scale required. The current year's budget shows that mobilisation of resources for financing the public sector outlay does not have a high priority in the government's scheme of things. A more "balanced" view of the distribution of resources between the public and private sectors is now favoured. Further, it is also questionable whether there is adequate administrative and organisational capability to make economic use of the Plan outlay in the public sector.

Another equally serious snag is, of course, that the absorptive capacity of the economy has been gravely impaired because of the sluggish rates of capital formation and investment prevalent for a long time. The performance of the public sector industrial undertakings in the last one year, for instance, has been most impressive. According to an estimate of the Bureau of Public Enterprises, they have turned in a profit of Rs 350 crores in 1975-76. The improvement in the balance-sheets of the public undertakings is genuine enough. Their surpluses arise essentially from better capacity utilisation and higher production. But the utilisation of their established capacities on a sustained basis and their future expansion are closely linked to an accelerated rate of investment and economic growth. Their weak order book position is, therefore, revealing of the present state of the economy.

The current exercise in updating the plan has, not surprisingly, resulted in the scaling down of most of physical targets in the core sector. Ingot steel comes down by 2 mn tonnes from the target of 12.77 mn tonnes set in the draft Plan. The fertiliser target has been scaled down from 4 mn tonnes to 2.9 mn tonnes. The cement target has been lowered from 25 mn tonnes to 20.89 mn tonnes and the coal target from 135 mn tonnes to 125 mn tonnes. Even after the downward revision of production targets, a part of the lower production will have to find export outlets.

The draft Plan had set a target of production of 140 mn tonnes of food-grains. The revised target has been now fixed at 122-125 mn tonnes. In case of sugar, the target of 5.7 mn tonnes has been retained. The only area where performance at the end of the Fifth Plan is expected to be better than the original target is production of crude oil — thanks to Bombay High.



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## MAHARASHTRA — I

## A Paper Tax

THE Maharashtra Agricultural Income-Tax Act has come in for sharp criticism in the twelfth report of the Public Accounts Committee submitted to the state assembly on Thursday. The Committee has brought out the major deficiencies in the Act which have been responsible for the "abnormally low yield" from the tax.

When, in 1962, the Agricultural Income-Tax Act was passed, the expected annual income from the tax was put at Rs 1.25 crores by the government. However, in not a single year have the collections reached this figure. The highest collections were Rs 1.07 crores in 1964-65 and Rs 1.06 crores in 1968-69. The Public Accounts Committee has also pointed out that the receipts have been "abnormally low" as compared with those from the agricultural Income-tax in some other states, as the following figures show:

	(Rs Lakhs)		
	1972-73	1971-72	1970-71
Bihar	21	27	32
Kerala	324	374	352
Tamil Nadu	229	215	187
Maharashtra	2	31	5

The Committee observes that though the yield from the agricultural income-tax has not only not reached the level expected as far back as in 1962, but has been falling from year to year, the government has failed to enquire into the causes of the low yield and take corrective action.

The Maharashtra Agricultural Income-Tax Act requires the Commissioner of Agricultural Income-Tax to issue a general notice before June 30 every year calling upon persons to file returns voluntarily within 60 days from the date of the issue of the notice and pay tax as per the return filed. The Act also empowers income-tax officers to issue notices to persons who are likely to have taxable agricultural incomes. The number of assessee had not exceeded 60 in any year till 1972-73. The government provided the following figures to the Committee of the number of notices issued from 1971-72 to 1974-75:

Year	Number of Notices Issued
1971-72	393
1972-73	286
1973-74	119
1974-75	302

Of these, the number of those who

were found liable to agricultural income-tax was as follows:

Year	Number of Those Found Liable to Tax
1971-72	100
1972-73	59
1973-74	73
1974-75	79

The Committee concludes that the administration of the Act "has suffered from a number of inadequacies, including the organisational set-up". Further, the tax collection machinery set up by the government "acted in a very casual manner in enforcing this Act".

The Committee has taken note of the Audit report of the Comptroller and Auditor General of India for 1972-73. Quoting the CAG's audit report, the Committee points out that there was no machinery in the department to conduct independent surveys and detect cases of persons who were liable to tax but had failed to file returns. A detailed survey was carried out in December 1974 which had established that there were as many as 3,000 potential tax-payers, but evidently no steps were taken to bring these potential tax-payers within the tax net. The results of another survey, of grape growers, carried out in 1972 are not even known. The Committee has asked the state government to submit to it within three months a detailed report on further action on the identified 3,000 potential assessee. The Committee has also emphasised the need for an executive field survey to tap new assessee and to unearth tax evasion by existing assessee. The field survey should be a continuous process and "not a periodical affair".

Apart from the lack of an independent organisation to administer the Act and a machinery to conduct independent surveys and detect tax evasion, the Committee underscores the high exemption limit of Rs 36,000 as the main cause of the low yield from the agricultural income-tax. The Committee has drawn attention to the exemption limits in Tamil Nadu, Kerala and Bihar, which are as follows:

State	Exemption Limit (Rs)
Tamil Nadu	5,000
Kerala: for individuals	5,000
Hindu undivided families	7,000
Bihar	3,000

In its memorandum to the Committee, the state government had stated that the exemption limit of Rs 36,000 was fixed by the legislature. The Committee, however, observes, "the government spokesman could not clarify as to on what basis this limit was proposed by the government while introducing the bill in the assembly and what were the main objectives behind the enactment". The Committee was also informed by the government that it was reviewing the position in the context of the implementation of the Raj Committee's recommendations on agricultural taxation. However, the Committee has asked the government to take an immediate decision on bringing down substantially the very high exemption limit of Rs 36,000.

The Maharashtra Agricultural Income-Tax Act also provides for certain deductions in the computation of taxable agricultural income, such as expenditure on cultivation, transportation of produce and maintaining farm implements and machinery in good repair. However, the norms by which the reasonableness of such expenditure is to be determined are not known. The Committee has, therefore, recommended to the government that it should collect data for different crops in the state and frame guidelines for the use of the assessing officers for ensuring uniformity in assessment. The Committee wants the state government to carry out its recommendations within three months.

The Committee has also commented on the lack of a separate machinery for collecting the agricultural income-tax. The Commissioner of Sales-Tax was concurrently appointed as Commissioner of Agricultural Income-Tax and the assessment work for the whole of the state was carried out by the two sales-tax officers — one stationed in Bombay and the other at Nagpur. These sales-tax officers were also entrusted with the assessments under the sales-tax and motor spirit taxation acts. It was only in July 1975 that sales-tax officers outside the limits of Greater Bombay and Nagpur were given powers to make assessments under the Agricultural Income-Tax Act in respect of cases falling within their local jurisdiction. The Committee has asked the state government to study the working of the new arrangement for one year and submit to it a detailed report on the findings within three months.



## MAHARASHTRA — II

## Much Ado about Very Little

(By a Special Correspondent)

A TOUGH sounding new policy for industrial location in the Bombay Metropolitan Region was announced by the government of Maharashtra on June 9, and was reported in the daily papers the following day. But if one looks beyond the words, one finds the policy departs very little in substance from the earlier position. Is it then the kind of policy statement intended to placate and temporarily silence an anxious public while in fact nothing much is being done? Or is it a statement expressive of a new attitude, so that although there may be little as yet which is different, one can expect that in keeping with this attitude more effective action will follow? One feels one should incline to the latter view. For one thing, the current anxieties of the public probably do not much extend to the question of industrial concentration in Bombay, being concerned with much more immediate matters. For another thing, there are some other straws in the wind not seen in the present policy statement, but which indicate that the government is anxious to encourage industrial development in other regions of Maharashtra: the most notable being the lower electricity tariffs and guarantees of no power cut up to 250 KVA which are offered for out-of-Bombay-Poona locations, as well as lower interest rates on loans, SICOM assistance and cash subsidies in some of the up-country areas.

The previous policy for the Bombay Metropolitan Region was announced on January 7, 1975 and has already been discussed in these columns (January 25, 1975). As was pointed out then, the proposed policy would add over 900 hectares of new industrial land to the areas already accepted and recommended in the BMR Plan. Since something like 60 per cent of this industrial land was then vacant, the concentration of industries in the BMR could certainly be expected to continue.

In the January 1975 policy, the BMR was divided into four zones: the island of Bombay (Zone I); the suburbs of Greater Bombay as well as the rest of the Bombay Peninsula up to the Bassein and Thana Creeks, as well as 140 hectares of the Wadala Anik Industrial area out of the island of Bombay (Zone II); the new Bombay project area (Zone III); and the rest of the BMR (Zone

IV). The new policy retains the definitions of these zones except that Wadala-Anik joins Zone I, as it properly should.

Broadly the earlier position was that in Zone I no new industries or expansions of industries of any size would be allowed, except what was described as marginal expansion of textile mills, and new essential small-scale industries such as laundries and bakeries. In Zone II again marginal expansion of textile mills would be allowed and other expansions in "really exceptional" cases and for the purpose of balancing capacity. In each case the approval for expansion would have to be secured from a High Power Committee at Ministerial level. Non-conforming industries shifting out of Zone I to Zone II would be allowed to expand and diversify, and new small-scale industries with an investment of up to Rs 7.5 lakhs in plant and machinery would be freely allowed. Industries of any size would also be allowed in the Electronics Export Promotion Zone at Santa Cruz. In Zone III (New Bombay), industries of any size would be freely allowed in the MIDC areas at Trans-Thana and Taloja, and within a newly created industrial zone of 1,600 hectares at Nhava Sheva. And in Zone IV large-scale and medium-scale industries would be allowed within the MIDC industrial areas, but small-scale industries could be set up anywhere outside these areas provided they conformed to the zoning requirements of the municipality or other local body.

There were two other steps that the government proposed, and one piece of advice to the Bombay Municipal Corporation. First the system of No Objection Certificates issued by the Industries Department which until then applied only within the Greater Bombay area would be extended to cover the entire BMR. Second, a Committee was to be set up under the chairmanship of N M Wagle to examine the question of imposing a levy on the existing and new industrial and commercial establishments in the BMR. The proceeds of such a levy would be used to provide incentives to units to shift from any zone to a higher numbered zone and to shift to other areas of the state; and part of it would be used to develop new growth centres elsewhere in Maharashtra. The advice to the Bombay Municipal Corporation was to reduce the industrial area

in Greater Bombay by 400 hectares, and to review the list of non-conforming industries so as to make it more realistic.

On July 31, 1975 the Industries Department stopped issuing NOCs altogether. The reason is not explained. Perhaps the High Power Committee was not functioning, or perhaps it found itself overburdened with matters of detail. In any case, the new policy statement now permits the issue of NOCs according to the new guidelines and according to the earlier guidelines of all those pending cases where "effective steps" had been taken before July 31, 1975 — meaning possession of land and placing orders for plant and machinery.

In the new policy statement, all mention of the Wagle Committee has been dropped. One presumes it has died a natural death. The question of the textile mills is omitted entirely, to be dealt with separately at a later date. The BMC is no longer being urged to reconsider its list of non-conforming industries. And the definition of small-scale industries is altered to mean an industry with less than Rs 10 lakhs investment in plant and machinery (as against Rs 7.5 lakhs earlier), the new definition being in line with that adopted by the government of India. This is good logic, but undeniably a step that can only increase, not reduce, industrial activity in the BMR. The new limit of Rs 10 lakhs, incidentally, is to exclude investment in pollution control equipment. An interesting loophole for someone clever enough to use it.

Other than these, there seem to be few changes of any significance, and few which are more restrictive than in the earlier statement. In Zone I, where the earlier policy advocated the permitting of only those small-scale industries which were "essential", the new policy recommends permitting only "service" industries as defined in the BMC's development control rules. These rules define a service industry as one which normally requires power not exceeding 10 h p and employs not more than 9 workers. The list of service industries includes such activities as flashing and non-flashing signs, and mechanical workshops with lathes, drills, grinders and spot-welding sets. These being activities which one presumes would not have come under the definition of "essential" as set out in the earlier policy, the new policy for Zone I is probably marginally more lenient than the earlier one.

In Zone II where under the earlier



policy expansions could be allowed in really exceptional cases and for balancing capacity, and any small-scale industry with an investment of up to Rs 7.5 lakhs was to be freely allowed, under the new policy only small-scale industries in the service sector will be freely allowed while other small-scale industries, which might earlier have been permitted as ancillary industries, are not to be allowed at all. As against this restriction, the new policy adds an Export Processing Zone for garments and leather goods in Greater Bombay which did not exist earlier (size not mentioned).

In Zone III the earlier policy of allowing industries of any size, small-scale, medium-scale or large-scale, provided they are located within the MIDC areas at Trans-Thana or Taloja or at Nhava Sheva is to continue. However, for the Trans-Thana location new industries are to be permitted in consultation with CIDCO, the effective local authority, so that some check can be kept on pollution. Further expansions of existing industries in this area are also to be permitted only in consultation with CIDCO, particularly for imposing conditions regarding pollution and housing of staff.

In Zone IV, the earlier policy of locating large-scale and medium-scale industries in the MIDC areas, and small-scale industries outside these areas wherever permitted by the local body is to continue, with the change that the 80 hectare Kalyan-Bhiwandi complex earlier intended for obnoxious units is now to be restricted to small-scale industries only, and expansion of all industries in this complex of whatever size is to be permitted only on condition of providing adequate housing for labour. This sudden concern for the Kalyan-Bhiwandi complex seems to be a result of the entry of the BMRDA (Bombay Metropolitan Regional Development Authority) into the fray.

The only real bite in the new policy statement is that the existing small-scale units in non-conforming areas in Zone I must shift to a conforming location in the same zone (or to a higher numbered zone if they prefer) by December 31, 1977. This will not affect industrial concentration one way or the other, but it certainly sounds tough. Let us see what it means.

Some fifteen years ago in the Bombay Municipal Corporation the Executive Engineer (Development Plan) sat down and with his purple pencil coloured those areas in Greater Bombay which he thought might be industrial. If you

happened to have an industry in Bombay, however long-established, and its particular location happened not to be coloured purple, through oversight or through the impossibility of attending to each detail, that industry became non-conforming. Indeed many of the textile mills in Bombay happen to be non-conforming. The multi-coloured plan was finally passed and now has the force of law.

If you happen to be a large or medium-scale industry, the fact that you are non-conforming does not matter. Under the new policy statement you will merely be asked to shift to a conforming zone. There is no question of enforcement, and this is an admirably

## LABOUR

### Misuse of Industrial Disputes Act

IT is often said that the Industrial Disputes Act of 1947 was passed to afford certain protection to the unorganised, unprotected working class. Whatever be the truth of this statement, a legitimate question that can be raised is, to what extent has it served its functions? Even an answer to this limited question would go beyond the scope of this paper. The Act itself states in its preamble that its aim is to make provision for adjudication and settlement of industrial disputes and to maintain industrial peace. The Act needs to be studied in its two aspects. First, what is the theoretical conception underlying the regulation of industrial disputes? Second, what is the machinery provided for it?

In common law, from which we still borrow heavily, the jural relationship between employer and employee is one of contract. Quite simply, this means that an employee agrees, before he enters employment, to work for an employer on certain terms and conditions which are mutually agreed upon. It is a contract for the sale of labour power at a certain price on certain terms and conditions. To give an analogy, it is no different from a contract for the sale of any other commodity, say certain goods, by a seller to a buyer at a certain price which he agrees upon before the contract is finalised on certain terms and conditions. The law governing such a contract of sale would then be the same as the law governing the sale of labour power, i.e., a contract of employment. Or so one should imagine.

The Industrial Disputes Act was

pragmatic view, considering how you came to be called non-conforming in the first place. Then why the crack-down on small-scale non-conforming industry? How many of those which are non-conforming are in fact a nuisance where they are? Why not wait until the municipality revises its development plan (the work is in hand) and then take stern action against those industries which are really found to be badly located, and which can easily shift? Perhaps the difference in attitude is because these industries are small, and with them it is possible to act tough, and be seen to be tough, little purpose though it may serve, and little good though it may do anybody.

passed in 1947 for the above-mentioned purposes. Thereafter, courts have repeatedly decided that ID Act puts certain restrictions on the power of the employer to hire and fire and that in certain cases, the courts had the power to reinstate an employee who had been wrongfully sacked, a power that they did not have under the common law — presumably because the Civil Courts did not have the power to grant specific relief of a contract of personal service. However, the fact has always been judicially recognised that the basic relationship between employer and employee is that of a contract; it can hardly be anything else given the fact that one of the fundamental forms of jural relationships that exist in a capitalist society is that of contract — based on the presumption that each individual is free to enter or not to enter into a contract, to dispose of or not to dispose of his property, to sell or not to sell his labour power on certain mutually agreed terms and conditions.

It is a truism that neither party to the contract can unilaterally alter the conditions of the contract. Applying this to the contract of employment, it would be an obvious truth to say that neither the employer nor the employee is free to unilaterally alter the conditions of employment. Despite the fact that this might appear to be a very elementary and obvious truth about any contract, a very strange and bold argument has been advanced by certain employers who have claimed that they have the right to alter certain very funda-



mental conditions of employment of their employees merely by giving what is known as a notice of change. This argument is based on a provision in the Industrial Disputes Act, viz, Section 9(A) which provides that no employer can alter certain terms and conditions of service which are specified in the said Act unless he gives a notice of change. The terms and conditions which the employer is prohibited from altering unless he gives a notice of change are wages, including the period and mode of payment, contributions paid to the Provident Fund, pension fund compensation or any allowances, hours of work and rest intervals, leave with wages and holidays, starting, alteration or discontinuance of shift working, classification by grades, introduction of new rules of discipline, etc. What the employers have sought to claim is that if they wish to alter any of these conditions of employment — for example, the amount of wages paid to an employee — all that they have to do is to give a notice of change, stating that employer proposes to reduce the wages, and then go ahead. They claim that this right has been given to them by Section 9(A) of the ID Act.

This argument is not only wrong in as much as the Bombay High Court has already decided in the case of *Haribhau Shinde vs F H Lala*, reported in the 70 Law Reporter, page 192, that the employer does not have the right to make such changes unilaterally, but it is also contrary to the law governing the contractual relations between persons. In the above mentioned case, the High Court of Bombay decided that once the conditions of wages have been fixed by the decision of a court order or by settlement, they cannot be altered merely by giving the notice of change. There is also the case of *South Indian Bank vs Chacko*, decided by the Supreme Court and reported in 1964, Vol I LLJ, at page 19, that the conditions of employment, once having been agreed to and settled between the parties, either by a settlement or an agreement or by an award, cannot be altered unilaterally by either party to the contract, but will have to be replaced by a subsequent agreement between the parties or by a decision of the court. These decisions of the Supreme Court and Bombay High Court are obviously based on sound reasoning. When a buyer and seller enter into a contract to sell certain goods on certain terms and conditions, neither the buyer nor the seller is allowed to break his contract and alter the conditions. Why then when a worker

agrees to sell his labour power and employer agrees to buy it on certain terms and conditions, should the employer be allowed to break his contract and fix fresh terms without the consent of the workers? As has been stated earlier, the legal relations between individuals under capitalism are governed by the law of contract and so it is even in the case of, or rather particularly in the case of, a contract for sale and purchase of labour power. There can be no rationale for or argument in support of a claim made by an employer that he is free to alter the conditions of employment unilaterally and compel workmen to work on the altered conditions. Section 9 (A) of the Industrial Disputes Act certainly does not give the employer any such power.

Let us consider what would be the implications if the employers' claim that they have the right to alter the conditions of service unilaterally is accepted. As has been mentioned earlier, Section 9(A) provides for alterations of conditions of service relating to wages, allowances, hours of work, leave, etc. If the employers were granted the right claimed by them, it would be open to the employer to give a notice of change to a worker employed to work on a wage of Rs 500 per month, that at the end of 21 days his wages would be reduced from Rs 500 per month to say Rs 200 per month. Similarly, if the worker was getting 21 days' privilege leave per year, it would be open to the employer to give a notice to the worker to say that henceforth he will get no privilege leave. Take yet another example; if a worker had been employed to work for 30 hours a week, it would be open to the employer to give a notice of change saying that henceforth he would have to work 48 hours a week. It is clearly an absurd claim for any employer to make and cannot be supported by any principles of law or on the basis of any rational theory.

In a recent case, one employer sought to assert that it did in fact have such a right to alter the conditions of service of its workers merely by giving a notice of change under Section 9(A). On February 6, 1976, the company gave a notice of change to the employees' union stating that it proposed to make certain changes which were specified in the notice. The changes proposed to be made were reduction of privilege leave from 30 to 21 days per year, reduction of casual leave from 10 days to 7 days in a year, reduction of sick leave and withdrawal

of certain other benefits. On March 24, 1976, the company put a notice on the Notice Board stating that in accordance with its intentions the changes have been brought into effect immediately. The union filed a complaint against the company under the Maharashtra Recognition of Trade Union and Prevention of Unfair Labour Practices Act alleging that the company had committed a breach of agreements, settlements, and awards which were binding on them by seeking to implement the change. The union obtained an interim injunction restraining the employer from doing so.

In a judgment delivered in the above complaint, the Industrial Court has held that the company has in fact committed an unfair labour practice in failing to implement the conditions of service which had been fixed by awards, agreements and settlements and has granted an injunction restraining the company from making any changes until the existing conditions are replaced either by an agreement or by an award. The above case ought to be a lesson for the entire working class in as much as they should be aware of the growing threat to their democratic rights to bargain collectively for the terms and conditions of their own employment.

An argument has also been advanced by the employers that if they are not granted this right to alter the conditions of employment, they will have no remedy if they want to make a downward revision in the conditions of employment. This is a false argument. As a matter of fact there is nothing to prevent an employer from seeking a downward revision in the conditions of service. In such a case what he has to do is to give notice of the proposed change and then approach the appropriate government to refer the question whether or not he should be allowed to make the change to a court for decision. The employers do not do this for the simple reason that they believe that they can enforce the change through sheer physical force.

The employers' claim to have the right to alter the terms of employment of their workers unilaterally merely by giving notice of the proposed change represents a distortion of the Industrial Disputes Act. Before the Act was passed no one would have argued that a contract of employment could be unilaterally altered. Now employers argue that the existence of Section 9(A) of the Act gives them the right to do so.



BOMBAY

## A Little More Suffering, a Little More Style

THE report of the *ad hoc* committee on the revision of the layout of the Backbay Reclamation scheme was published in June 1976 to elicit public opinion, so that this could be taken into account by government when considering the report and formulating its future policy. The *ad hoc* committee was constituted on April 4, 1975 and it held its fourth and last meeting on June 13, 1975, which shows remarkable dispatch, particularly when contrasted with the year-long delay in placing the committee's report before the public.

Before discussing the report of the *ad hoc* committee, it may be useful to review something of the history of the Backbay Reclamation scheme and the circumstances leading to the appointment of the committee.

The Backbay Reclamation scheme was conceived as early as 1864 but actual work on it began only in the early 1920s. The scheme which was undertaken envisaged the construction of a sea-wall from Chowpatty to Colaba point, thus enclosing the shallow tidal lands between the line of the wall and the existing shore line, which then ran along the alignment of the Western Railway track. The area to be enclosed was divided into eight blocks. Blocks I and II covering the area from Chowpatty to the last of the Marine Drive buildings and extending towards the land now occupied by the Sachivalaya, as well as Blocks VII and VIII which were later vested in the Ministry of Defence were reclaimed before the scheme was abandoned in 1930. Left unreclaimed at the time of abandonment of the scheme were 550 acres of land in Blocks III to VI extending from Nariman Point to Cuffe Parade and along this to the shore line of the earlier reclamation.

The Reclamation has had a troubled history from the outset. In the decade of the 1920s, and again in the past decade when the abandoned work has been resumed, there were repeated charges of corruption and illegal gratification. Nariman Point is named after K F Nariman, a prominent lawyer and public figure of 1920s against whose

allegations of corruption Harvey, the Superintending Engineer for the Reclamation, in 1926 filed a suit for libel. The suit was lost and Nariman was vindicated. But at that time there seems to have been little opposition to the scheme on technical grounds. In the recent decade, even more frequently heard than the charge of illegal dealings has been the criticism that the reclamation is unsound from the point of view of urban development. The argument is that it would add extensively to available commercial floor space in the Fort area, and thus increase the concentration of activity at the southern point of the Bombay peninsula. Because of the shape of the peninsula, this southern extremity is particularly difficult and expensive to service, mainly in terms of transport, but also other facilities such as water supply, power supply and sewage disposal.

### BARVE COMMITTEE'S REPORT

Whenever criticised on technical grounds, the government has consistently protested that the undertaking of the reclamation is in keeping with the recommendations of the Study Group on Greater Bombay set up in March 1958 under the chairmanship of S G Barve who was then the Secretary to government in the Public Works Department. It may be useful therefore to look at the original report of the Study Group, and at the reports of the panels appointed by the Study Group to assist it in its work. There were five such panels, four dealing with housing, building materials, traffic and industrial location, and the fifth dealing with "Land and Open Spaces and Other Community Requirements". The reclamation was a recommendation of this last panel, and it is therefore firstly with the report of that panel that we are concerned.

In paragraph 19 of its report, the panel list

"some of the sites on the northern borders of the Island where large pieces of land can be developed and made available for use as housing sites or open spaces or for some of the other community requirements

for the relief of the Island population."

Two main areas are listed, one in the Mahim-Dharavi area where 2,135 acres could be reclaimed and another between Wadala and Chembur where 2,365 acres would be reclaimable. These are described and discussed in detail, including the method of reclamation and the problem of salt pans covering some of the areas. Then some further areas are listed, without any discussion, and these include 150 acres west of Mahim Causeway and south of Bandra, 275 acres near Vikhroli, 300 acres near Bhandup railway station, 300 acres near Mulund railway station and 400 acres north of the Andheri-Versova Road. The paragraph runs into about 550 words, and concludes with the following sentence:

"Similarly it would be possible to reclaim about 575 acres in the Backbay Reclamation area and about 129 acres west of the Hornby Vellard near the race course."

In the body of its main report, after referring to the relevant paragraphs of the report of the Land and Open Spaces panel, the Study Group lists the three reclamation proposals relating to large areas: 575 acres at Backbay, 2,135 acres at Mahim-Dharavi, and 2,700 acres between Wadala and Chembur. Four paragraphs later occurs the following:

"All these three blocks lying just on the periphery of the Island are very conveniently situated, with reference to the congested industrial and residential areas in the centre and to the north of the Island. The possibilities for securing open spaces in the congested localities of the Island are very limited. If these large blocks of land on the periphery become available it will be possible to eke out the shortage of space for community requirements for the Island community by providing for some of these in the peripheral reclaimed areas. The problems of providing housing at a convenient distance for the slum dwellers in the Island as well as for making up the deficit of housing accommodation against the requirements of the present population of the Island area will also be greatly facilitated by these reclamations."

A little later:

"Amongst our recommendations for the improvement of conditions in the Island area we rate these reclamation proposals very high. Many of the ills of Bombay's civic life spring out of sheer lack of space in the Island area. These reclamations on the periphery of the Island will furnish to the authorities a considerable pool of additional open space with which it should be pos-



sible largely to resolve and overcome the defects and deficiencies that long years of 'Drift' and lack of planning have imposed on the Island population. Apart from providing space for public housing and slum clearance and to eke out the open space needs of the Island, the command over this considerable land resource will furnish to the town-planning authorities a valuable strategic weapon for offering "relocation sites" to induce the thinning out of the congestion in the Island. While the need for land for community requirements in and near the Island of Bombay is indeed desperate, quite large areas are available for reclamation within or in the immediate periphery of the Island and, therefore, competently and energetically handled, the situation is not so hopeless and beyond retrieve, as may appear at first sight."

It seems obvious both from the report of the panel and the main report of the Study Group that the reclamation of these sites was intended primarily to relieve the acute shortage of open spaces within the Island, and to make available land for community requirements including housing and accommodation of slum dwellers.

The Study Group made very many other recommendations, particularly relating to the location of industry, provision of public housing, development of the suburbs and so on. Of interest to us and relevant to the Backbay development are two other proposals discussed first in the report of the Land and Open Spaces panel and again in the main report of the Study Group.

One concerns the establishment of an additional business centre at Bandra-Kurla, which this is described in para 23 of the panel report as "highly desirable". A second series of proposals is set out by the panel in para 29 of its report which is headed "Shifting of offices, etc, outside the city to remove congestion". These proposals are taken up and discussed in the main report of the Study Group, in whose summary of conclusions and recommendations they appear under the headings "Alternative Centre of Business" and "Relocation of Government Establishments".

The report of the Study Group was submitted in February 1959. Of its many recommendations, the only two that seem to have been taken up seriously were the construction of a bridge across the Thana Creek, and the Backbay Reclamation.

#### DISPOSAL OF PLOTS

Work on the reclamation began in the early 1960s, and was initially carried out by government. The land so reclaimed was put up for auction and the first plot disposed of for commercial use in 1961 at a notional price of Rs 5,155 per sq metre. In view of subsequent developments, it is important to understand what the scheme was at that time, and what the notional price meant.

The scheme at that time envisaged about 264 acres of disposable plots in the total reclaimed area of 550 acres. The rest of the area was to be devoted to roads, open spaces, a sub-station, some minor users and a proposed railway car-shed for the new underground railway project. Of the disposable plots, 60 per cent were to be retained for residential use and 40 per cent for commercial use. The FSI on these plots would be 3.5 and 4.5 respectively, higher than anywhere else in the city. The FSI of 3.5 for residential and 4.5 for commercial buildings was soon realised to be uncomfortably high, because the road widths available would be incapable of supporting the traffic for such an intense development. It has accordingly been reduced to 3.5 for commercial schemes on the reclamation, but stand unchanged at 3.5 for residential use.

Plots were to be given on a 99-year lease, the annual lease rent being calculated at 6½ per cent per annum of the notional price. Moreover, the first two years of the lease would be rent-free, followed by two years at half rent, followed by years in which the full rental would be paid. Even at that time, when interest rates were considerably lower than they are now, 6½ per cent per annum was a ridiculously low figure of interest for the building trade. And particularly after taking the rent-free and reduced rent periods into account, this meant that the notional value was artificially high, and nothing like the cash-down value that a builder might pay for a privately sold plot. The artificially high figure, which had no meaning except that it occurred at one step in the calculation of the lease rent, was much touted and used by government to claim that the reclamation was "a gold mine" and would make a vast difference to the state's revenue earnings.

The scheme was almost universally

criticised, at that time on the ground that it would add a substantial volume of commercial space to the Fort area, and thus increase to an unmanageable and intolerable level the number of daily commuters to the business district. Since the dimensions of the available traffic arteries were perforce restricted, the consequence in future years would be that a very great investment in transport systems would be needed to cater to the additional traffic. (It was calculated that with the Backbay development there might in future be something like three times as many workers in the Fort area as there were at that time, when congestion was already severe.) Perhaps the only supporters of the Backbay Reclamation scheme (but they were not outspoken) were those technocrats who for reasons of prestige or because they wanted to demonstrate their technical skills desired an underground railway in Bombay. For them the considerable travel demand from the Fort area caused by the reclamation was an important parameter in justifying the need for such an underground railway.

#### GADGIL COMMITTEE'S OPPOSITION

The near-universal opposition to the scheme was reflected repeatedly in the reports of various official committees and investigators. In March 1965 the government of Maharashtra appointed a Committee under the chairmanship of D R Gadgil to report on the development of the Bombay-Pune regions.

Reporting a year later, the Committee observed:

"...there has been high concentration of building activity for government offices such as the new Sachivalaya and the Government of India offices in areas at the southern end of the Island most likely to aggravate traffic congestion and lengthening the journey to work. This was avoidable. The decision to spend very large amounts on reclamation of land in this area also appears to be unfortunate. The prices at which reclaimed land is sold may seemingly make the venture profitable. It is highly doubtful whether this would be so if the total social costs, recurring and non-recurring, of the burden imposed by the additional activity and population on the reclaimed area in terms expenditure on roads, services and amenities and travel to work, etc, are taken into account." (Para 5.2).



And later:

"As far as possible legislative and administrative business should be shifted out of the Bombay Metropolitan Region; this will help to correct to some extent the present imbalance. Where, for any reason, this is not possible the location of the activity should be transferred at least to the mainland area within the region. We should also recommend that no major offices or commercial houses should, at least henceforth, be allowed to be located in the Fort area." (Para 5.4)

The World Bank Mission visiting Bombay in November 1970 had the following to say in its Report on Bombay:

"... the most controversial project in Bombay continues. This is the reclamation of Backbay, a large body of water already partly enclosed. If this project goes ahead and the land is sold for commercial development, may be another 1,50,000 jobs will be created there by 1981, increasing not only the load on rail transportation to the two terminals but on road transportation from there on. (If all the occupants of the jobs came by rail, they would need 50 train-loads even at the peak density.)" (Para 24)

And further:

"It is only natural that with the cheap fares currently available, people with jobs in the Fort area would tend to move further out, where land prices are cheaper than they would have done otherwise. The trade-off between the cost of living space and transportation is weighted further out than it would be if economic costs of transportation were charged. That a policy which tends to aggravate this situation is even considered occurs because the cost of adding commuter services at low prices is borne by the Union Government; the benefit from reclamation of land in the Backbay area in fiscal terms accrues to the Maharashtra government. However, all resources ultimately come out of the same pot and it is doubtful whether anybody gains from such a policy in the end." (Para 72)

In other words, while the Maharashtra government might be earning revenue all right from the Backbay Reclamation project, other agencies such as the Union Government which was operating the commuter railway system, the municipality which was providing the basic services and the BEST which was running a bus system and supplying power, might all be spending far more on account of this project than the Maharashtra state government earned so that overall the project might result in a net loss to the public exchequer. This point was examined by CIDCO, the New Bombay Develop-

ment Authority. This one would imagine, was a transgression of CIDCO's mandate, but it was justified on the ground that one of the purposes of the New Bombay project was to persuade government that shifting its offices to New Bombay was a sounder proposition than allowing increasing concentration in South Bombay, not only from the urban planning point of view but financially as well. In an unpublished study carried out in the early 1970's CIDCO compared the costs and the revenue earned from the Backbay development and came to the conclusion that if one took all public costs into account, the reclamation resulted in a negative return on capital invested.

As a result of these repeated criticisms, government agreed to increase the proportion of residential to commercial

area from 60:40 to 70:30. But there was no stopping the scheme, and a few years after the auctioning of the first plot in 1964, the manner of disposal of the plots also was modified. Now instead of government undertaking reclamation, private parties were assigned plots by defining co-ordinates over the sea, and were permitted to carry out their own reclamation. The manner of disposal of plots was changed from auction to disposal by negotiations. The last disposal of 11 commercial plots was in April 1974, when these plots were assigned to 8 builders and 3 banks at a notional price of Rs 3,600 per sq metre to one builder who was surrendering some other land in exchange and at Rs 5,400 per sq metre to the rest. One plot was also assigned at the same time to another builder for



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residential use at Rs 3,000 per sq metre. These transactions resulted in an attack on the scheme from a quite different quarter.

#### CRITICISM VINDICATED

In June 1974 a writ petition was filed by a Member of Parliament, a Member of the Maharashtra Legislative Assembly, a Municipal Corporator and a social worker, naming as respondents the State Government, the Municipal Corporation, the Union Government, the Chief Minister and the Ministers for Revenue and for Urban Development, various officials, and each of the persons who had been allotted a plot two months earlier. The petitioners contended that allotment was *mala fide* and that the notional prices at which the plots had been given were grossly inadequate. The petition was heard in the first week of August 1974 and was not admitted. An appeal was heard by a division bench in September and October, and the petition was admitted, with the lower court being directed to hear and finally dispose of it. This led to a hearing from April 1975 to September 1975 probably the longest-ever hearing of a writ matter before any High Court in India. It also resulted in a judgement which took a month to deliver, and must also probably be the longest judgement ever of any High Court in India (989 double-spaced type-written foolscap pages).

In the course of the hearing it became clear that the nine private builders to whom plots had been assigned were in fact only four or five, the rest being the same individuals under different names. It also became clear that while almost 60 builders had applied for plots on the Backbay Reclamation, the final allotments had been made to these few, following discussions at Ministerial level. The notional price at which most of them were to be allotted plots was fixed at Rs 4,500 per sq metre, but the vigilance of one of the officials in the Sachivalaya resulted in this being increased somewhat arbitrarily at the last minute to Rs 5,400 per sq metre.

The judgment found in favour of the petitioners on almost all points of law. On the first and fundamental issue concerning locus of the petitioners, the judgment held that the petition was maintainable, because the petitioners were tax payers, because the public was affected in the matter, and because

the property of the State, which is what the Backbay Reclamation lands are, is held in the nature of a trust. The state is accountable to the people for the manner in which this property is disposed of and cannot deal with this property in the way an owner of private property might do. It is bound therefore to dispose of the plots by auction or tender, or if by negotiation, then in a way which is to the best advantage of the public body. The judgment held that in the case of administrative orders the court is empowered to interfere under article 226 of the Constitution. It also held that ministers and other officials cannot deal in land, and this can be dealt with only by the Collector under sections 294 and 295 of the Maharashtra Land Revenue Code 1966. Finally, and most important, the judgment held that the notional value fixed at Rs 5,400 was an undervaluation and that the notional value should be revised to Rs 7,200 per sq metre. In the case of two of the respondents, the Court Order reads:

"I have carefully considered the case, both of respondents No 8 in connection with plot No 206 in exchange and of respondent No 19 in connection with plots No 73A, 74, 83 and 84, but I have no hesitation to hold that these transactions also, in any view of the matter, are of gross undervaluation and for the benefit of the respondents."

They too were asked to pay a higher notional price, failing which they, like the rest, would be dispossessed. The petitioners were awarded costs as agreed between the parties.

The allottees have now filed appeals against the judgment. The State government has not appealed, being, placed in the poignant position that although it has lost its case, under the terms of the Order it stands to earn a higher revenue, and can hardly protest against that.

#### AN ARCHITECTURAL HAPPENING

Let us turn now to the report of the latest *ad hoc* Committee on the Backbay Reclamation, though there is no reason to suppose that the government will take this Committee's report any more seriously than it has the reports of past Committees and Study Groups. The Committee was set up in April 1975, no doubt as a consequence of the various pressures then being exerted on the government. A well known Bombay architect had recently published a proposal for a revised layout

of the Backbay development, and the opportunity offered for a face-saving device for revising the layout was perhaps too good to miss.

The Committee's report is remarkably complete, and includes the minutes of each of the four meetings held by the Committee. It also includes the architect's write-up of his original development proposal. This concludes with the following revealing sentence: "All in all, this site could become an event for the city, a new and unique water front, unprecedented in the contemporary Indian Urban Scene". Was this a sentence meant to tempt the government into revising the scheme? One thinks not. From the proposals of the Committee as they have finally emerged, it would seem rather that the government's preparedness to revise the scheme is being seized upon as an opportunity to convert what is left to be finished of an urban disaster into a partial architectural happening.

The present Backbay Reclamation (Blocks III to VI) forms a more or less rectangular area with the long edge running north-south along the new sea front. The northern top of the rectangle has already been reclaimed or otherwise disposed of primarily for commercial use. The southern end of the rectangle is reserved for the underground railway car-shed. So one is left effectively with a square area in the middle which remains to be reclaimed, and out of this too the south-east corner has been already given over to residential development. Of the original 550 acres of the scheme 200 acres have already been committed or developed, and the question is what to do with the remaining 350.

Out of the 350 acres remaining to be reclaimed, the Committee proposes that a triangular area of 105 acres be left unreclaimed as a lake and a pond, the one being separated from the other by a weir over which runs a pedestrian bridge. The lake will be tidal, but the pond behind the weir will always have water in it. The water front along both lake and pond is to be a continuous pedestrian promenade backed by various public and other buildings. Around the pool are to be 5-storeyed constructions with parking at the lowest level, shopping above, restaurants above that, and residential accommodation on the remaining upper floors. Reading the plan for the activities around the lake water front



## STATEMENT OF LAND USES IN BBR AREA

Land Use	As Per Original Layout for the Entire Area	(Area in acres)	
		Existing Area Including Area Under Reclamation	Area as Proposed as Per <i>ad hoc</i> Committee's Recommendations
(1) Residential	125	36	71
(2) Commercial	80	80	78
(3) Open space	67	8	67
(4) Public purpose	21	5	28
(5) Parking	8	6	11
(6) Roads	141	65	91
Sub-Total		200	
(7) Railway car-shed	90*	—	90
(8) Special purpose plots (including parks)	—	—	11
(9) Lake (pond and unreclaimed sea portion)	—	350	105
	550 (532)	550	550 (552)

\* Could this be 107 including roads, inferred from para IX (a) (A) (ii)?

from north to south, these are: Air-India, Oberoi-Sheraton, National Centre for Performing Arts, Nehru Hall, Civic Centre, Planetarium, Art and Design Centre, Alternative Location for Ministers' Cottages, Play-ground, Fishermen (how picturesque — a small harbour for fishing boats!) and Helipad. Is it necessary to ask which stratum of Indian society will be found using these various privileges?

Of the lands proposed to be reclaimed and developed by the Committee, 71 acres (Category A) will be for public purposes such as promenades, amphitheatre, playgrounds, parking lots, water front, helipad and a small landing place for cargo handling facilities for fishermen. The Committee presumes that this area will not yield any revenue either in the form of a premium or annual lease money. A second category of land, Category B, includes 30 acres to be used for schools, hospitals, Arts and Designs Institute, planetarium and such other activities. A third category, C, 16 acres, is for residential buildings where the Committee recommends that the FSI be reduced to 2 and that the plots not be allotted under any circumstances to private builders but be disposed of for direct use by the state or Union government, public sector corporations, the PMC, approved co-operative housing societies and so on. A fourth category, D, of 11 acres is to be developed as special plots reserved for buildings which provide shopping cen-

tres, restaurants and other approved commercial uses with parking on the ground floor and shopping, restaurants and residential accommodation on the upper floors. These are the plots around the pool. This area the Committee strongly recommends should be developed by a single central agency such as the Life Insurance Corporation with the FSI to be negotiated with the government.

The Committee then presents a carefully detailed exercise of the costs and returns from this entire development. The costs are expected to be of the order of Rs 13 crores, and the returns Rs 29 crores out of which Rs 18 crores are on account of the 11-acre development in category D. The recommendation is that the entire work of reclamation and development of the total area of 128 acres be entrusted to a single agency, which will hand over the lands under categories A, B, and C to government which will collect the Rs 11 crores revenue due from these. The developing agency will be left with the lands and the development in category D making a profit of Rs 5 crores on its Rs 13 crores investment. The total profit to the government and the developing agency will be a net Rs 16 crores and the Committee proposes that part of this, Rs 1.5 crores, be set aside for constructing a transit camp for 1,500 families to alleviate the living conditions in the poor and congested parts of the city. A gesture of concern for the poor, and let us be

thankful for that. It is mentioned in paragraph VI (h) that the area for this purpose has been earmarked in Block VI of the Backbay Reclamation and is shown in Appendix VIII B of the report. One searches in vain on that plan and through all the other plans to locate this area. Was it forgotten in the excitement of labelling Civic Centre and Helipad, Nehru Hall and Amphitheatre?

## MORE LAND FOR COMMERCIAL USE

The accompanying Table is given in the Committee's report (Appendix X). The totalling is as given in the report, and is incorrect. Our totals are in brackets. This interesting Table shows that the 105 acres of the lake come exactly out of a reduction of 54 acres in the residential area and 50 acres in the area of roads. There is an increase of 7 acres from 21 to 28 in the area for public purpose and although it is not clear what this represents, the 11 acres of special purpose plots are almost certainly (again this is not clarified) the area for restaurants, shopping centre and so on around the pool. As against the original scheme, therefore, the Committee's recommendations would seem to increase the acreage for commercial use by anything from 11 to 18 acres.

One should no doubt be thankful that the horrifying kind of residential development which one sees on the Backbay Reclamation at present is to be reduced from 125 acres to 71 acres in extent. However since the commercial area is actually to be increased, the impact of the new proposals on the transportation problem will be worse than in the original formulation of the scheme. The total floor space under commercial use will in effect be greater even than that in the original layout for the entire area. And the ratio of residential to commercial areas is now something like 40:60, as against the original 60:40 which was later improved to 70:30. (This assumes that what the Committee calls "public purpose" is in effect a commercial use, in terms of trip generation. The fact that the public purpose space is not financially exploited because it belongs to a public agency is irrelevant.)

One might also ask whether a reduction in the road area from 141 to 91 acres will be adequate to service the development? After all the reclaimed



acreage has been cut by under 20 per cent and the road area by over 35 per cent. Judging by the road dimensions in relation to the plot development as they already exist, on the Backbay Reclamation, one would have suspected that the road areas as defined in the original scheme was already inadequ-

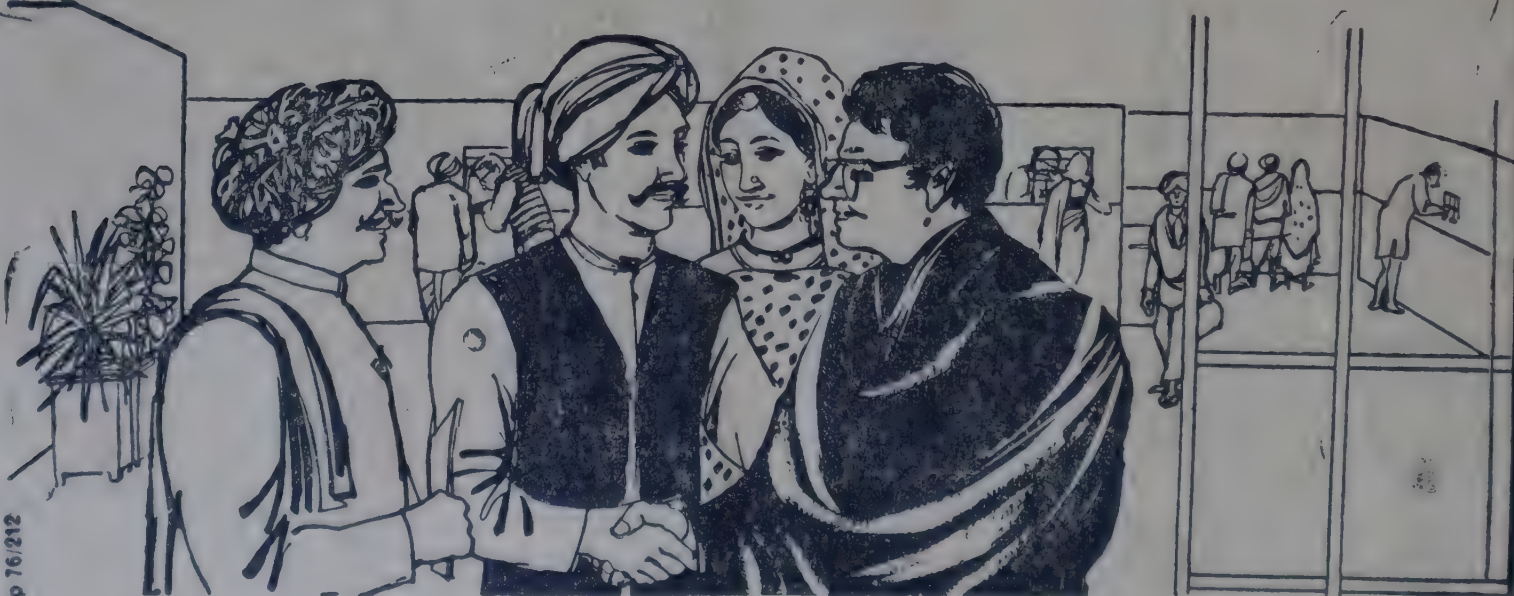
ate. To cut it still further hardly seems realistic.

So despite the reduction of the total extent of the reclamation by 19 per cent by the introduction of the lake and pond, it would seem that the new proposals will probably result in even more severe transportation demands

than the first scheme; that the road systems within the development will be worse than before; but that undeniably the new complex will be a good deal more stylish than what we have now. How apt, for the city and the times: a little more suffering, a little more style.

## 7 years of bank nationalisation

- Advances by Public Sector banks to agriculture and other priority sectors have risen from Rs. 440.96 crore to Rs. 2106.01 crore.
- Number of borrowers' accounts have gone up from 2.6 lakh to over 37 lakh.
- Commercial Bank branches have risen from 8,300 to over 20,000. Of these 7,383 are in rural areas, compared to 1,860 in 1969.
- 50 regional rural banks are being set up. Nineteen of these are already functioning and giving easy credit to rural people.



**July 19, 1976 marks  
the 7th ANNIVERSARY DAY**



## LEBANON

# Behind the Syrian Invasion

(By a Special Correspondent)

EVER since the Palestinian resistance emerged as an independent armed force, both imperialism and the reactionary forces in the Arab world have known that the Palestinian revolution has become the focal point of the Arab revolution. Just as in the case of the massacre in Jordan during the Black September of 1970, the principal aim of the Syrian invasion of Lebanon was to kill two birds — the Palestinian resistance and the local progressive forces — with one stone. To many, the invasion appeared as a sudden and baffling reversal of relations between the Syrian invaders and the Palestinian resistance. But if we are to understand the significance of the invasion we must concretely examine all the forces behind it: American imperialism, the Syrian regime and the Phalangist right in Lebanon.

Following the October War, American imperialists worked with renewed vigour to establish an imperialist peace in the Middle East. Even though they achieved the Sinai Accords between Egypt and Israel, the United States well understood that this was but a first step. If a Pax Americana was to be truly guaranteed it was imperative that the principal force opposing it, the Palestinian resistance, be liquidated. But at this point the imperialists had to reckon with their own weakness and with the concrete reality of Lebanon where the Palestinian resistance was physically located. Ever since the forward march of the Vietnamese and Cambodian revolutions, and particularly since their victory, direct intervention by the US in a semi-colony has been ruled out. It would be boldly opposed not only by progressive forces globally but also by popular forces in the US isolating the reactionaries. Furthermore, the US could not simply stage a repetition of the Rogers Plan that was implemented in Jordan in 1970. The Lebanese army, unlike its Jordanian counterpart, was an extremely weak and small force, comprising but 18,000 men, out of whom only 8,000 were fighters (the rest being officers and administrators) and was hardly capable of confronting the Palestinian freedom fighters. This much was demonstrated in the confrontation between the two in 1973. At the same time, it was not possible

to dramatically increase the strength of the army since the prolonged presence of the Palestinian resistance in Lebanon had created a highly politicised people whose absorption in the army would have made it highly unreliable as a weapon against the Palestinian resistance. Even the existing army split when used to liquidate the freedom fighters in the present crisis. Imperialism was thus left with two alternatives: to use an outside but an Arab interventionist force or to create a para-military right within Lebanon, beefed up by foreign mercenaries and arms. In fact, it employed a combination of both, on the one hand the Syrians, on the other the Phalangists in Lebanon.

## CHARACTER OF BAATH PARTY

To understand the character of the of the Syrian state power, we must look at the nature of the Baath Socialist Party and the struggles within it leading to Assad's coup of November 1970. Started as a Pan-Arab movement in the 1940s, the Baath (Renaissance) Socialist movement was made up primarily of petty-bourgeois nationalists. Opposed to both imperialism and their local allies (the indigenous bourgeoisie), the Baathist claimed to stand for a third road, neither capitalist nor communist. In time, a left wing emerged within the Baath party, one that had a non-antagonistic relationship with communists. But an anti-communist right wing remained. In 1966, the left wing of the Baath party in Syria came to power under the leadership of Nureddin Attasi, a moderate who was also acceptable to the left. President Attasi's regime took a militant attitude to Israel. At the 9th Congress of the Baath Party in 1966, it resolved to set up a guerilla organisation. An expression of the limited anti-imperialism of a progressive petty bourgeoisie regime, this organisation was al-Saiqa which in fact started functioning after the 1967 War. Meanwhile, the opposition of the right wing to Attasi's militancy was led by the Defence Minister, Assad. In the Black September of 1970, when the Palestinians captured three important towns in Jordan, it was Defence Minister Assad who masterminded the entry of the Syrian army, ostensibly to

assist the Palestinians, but in fact to disarm them. In November 1970, Assad led the coup that ousted the left wing from power. Immediately the top leadership of al-Saiqa was arrested and the organisation brought under the control of the Syrian army.

The attitude of the Syrian regime to the Palestinian resistance from 1967 till now also typifies that of the other Arab states. Whether state power was bourgeois or petty-bourgeois, whether the right predominated or the left, both well understood that the Palestinian revolution is not only about the liberation of Palestine, but of the entire Arab world. When the right controlled state power, the attempt was to physically liquidate the Palestinian resistance; when the left was ascendant it attempted to divide the resistance and empty it of its revolutionary content. All the time the Syrian regime chose to co-exist with the Palestinian resistance, even providing it material and moral support, it always defined the relationship between the two as that of Syrian hegemony. The crux of the policy was to use the contradiction between imperialism-zionism and the Arab masses in its own interest.

Such was indeed the case in the period after the 1974 Sinai Accord between Egypt and Israel. It was not that Syria was opposed to a Pax Americana in the Middle East, only that it was opposed to a separate settlement between Egypt and Israel which would isolate Syria and undermine its bargaining power with imperialism. In order to strengthen its position vis-a-vis imperialism it chose to denounce the Accord and materially bolster the Palestinians, on the one hand, to isolate the Egyptians and, on the other, to convince the Americans that only Syria could be their principal defence against the rising forces of the Palestinian and Arab revolution. But, as we shall see, the rapidly unfolding events in Lebanon changed that, undermining Syria's attempt to control the forces of the Palestinian resistance, even threatening the very possibility of a Pax Americana, thus precipitating the Syrian invasion in favour of the Lebanese Phalangists.

## SITUATION WITHIN LEBANON

The Maronite Phalangists (the Kataeb) are the principal rightist force in Lebanon. The confessional form of Lebanese politics was historically rooted in the politics of 'divide-and-



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Here is our foreign exchange balance sheet

Foreign exchange earned by exports	:	Rs. 5,40,00,000
Foreign exchange saved by recovery of lead and antimony	:	Rs. 2,15,00,000
		<u>Rs. 7,55,00,000</u>
Value of imports during the same period (including canalised items)	:	Rs. 3,93,00,000
Foreign exchange outgo by dividends, know-how fees, royalty etc.	:	Rs. NIL
Net foreign exchange earnings		<u>Rs. 3,62,00,000</u>

  
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rule' of French colonialism. The French ruled through the Maronite Christians and chose them to rule once they departed. The Phalangist Kataeb represents a populist ideology among the Maronites. While its political bureau is made up of top businessmen, rank and file Phalangists come from the petty bourgeoisie. Trained by French and Jordanian military experts and advisors, the ranks of the Phalangists paramilitary organisation are beefed up by both Egyptian and Lebanese mercenary recruits. While the Phalangist leadership has important business interests in Saudi Arabia, Kuwait and the Gulf, and is thus economically dependent on Lebanon remaining within an Arab context, politically they want to keep Lebanon out of the Arab context. The failure of the Lebanese army to rout the Palestinian resistance in 1973 brought the Phalangists to the fore in the struggle against the left. At the same time, the close relationship between the Palestinian resistance and the Lebanese progressive forces, and the increasing strength of the latter, threatened to undermine the confessional electoral arrangement that had been the guarantor of Phalangist political supremacy in Lebanon.

The increase in the strength of the Lebanese progressive forces and their ability to withstand the onslaught of the right wing has been in marked contrast to the fate of the national forces in Jordan. In part, the explanation lies in the lessons the Palestinian resistance learnt from the 1970 Jordanian massacre. Its principal error then was not to allow the national Jordanian forces to organise as an independent entity. Instead, the resistance took them inside its own organisation. When the Jordanian army attacked the Palestinians they also massacred the Jordanian revolutionary forces while presenting the struggle to the world as a strictly Jordanian/Palestinian conflict. Following Jordan, the resistance changed its policy towards the national movement in the Arab countries. Not only did it help the national forces to organise, it also helped to arm and train them militarily. It was then no surprise that the Lebanese right saw the resistance as the major factor behind the growth of the Lebanese left, both in their mass political support and as an armed organisation. And thus, as a first step towards liquidating the left,

it sought to limit the presence of the Palestinian resistance on Lebanese soil.

#### FISHERMEN'S STRIKE

The present crisis in Lebanon has gone through four different stages. First came the February 1975 fishermen's strike in Saida, in the south of Lebanon. The strike was of more than local importance for two reasons. One, fishing in Saida being under the monopoly control of Camilla Chamoun (Minister of Interior, head of the National Liberal Party and a principal figure on the right) and another big Lebanese family, the strike immediately brought the Phalangist Kataeb and the National Liberal Party's own militia into the conflict. Secondly, since Saida is situated in the south, where there is a heavy armed presence of the Palestinian resistance, it underlined the indirect involvement of the resistance in terms of moral and material support. In what ensued as a confrontation between the army and the Lebanese progressive forces backing the fishermen, the former had to retreat, underlining the impressive strength the latter had built up in just a couple of years.

The second stage of the crisis saw a direct armed confrontation between the Phalangists and the Palestinian resistance. It began with a Phalangist attack in April on a bus bringing back demonstrators from a Rejection Front Rally. At this point, the right ideologised the struggle as one against the Palestinian foreigners. But when they found they had to confront not only the Resistance but also the Lebanese progressive forces, and the combination proved too strong for them to face, in their retreat there was an ideological shift. Now the Phalangists pictured the battle as a religious one and demanded the partition of the country along confessional lines.

In the third stage, having lost on the battlefield, the right attempted to recoup its losses on the constitutional and propaganda fronts, especially after the Presidential election of April. But at this point there was an important realignment of forces, with the Syrians coming out openly against the Lebanese left. Hitherto, so long as the internal Lebanese struggle had not intensified and the contradiction between the Arab states on the question of peace with Israel occupied the

stage, Syria openly backed the Palestinians to undermine the Egyptian-Israeli Sinai Accord. But now the intensification of the internal struggle in Lebanon had resulted in joint Palestinian-Lebanese left control of over 80 per cent of Lebanon's territory. Signifying the emergence of an anti-zionist force independent of Syria, it threatened to undercut Syria's bargaining power vis-a-vis US imperialism. Even more, if the left came to power in Lebanon, and this seemed a real possibility then, it would dash Syria's hopes of an overall regional settlement with Israel.

#### SYRIAN ENTRY

The Syrian entry into the rightist camp came in steps. After a meeting between Assad and Jumblatt in early 1976, the Syrians began a propaganda war against the Lebanese progressive forces, painting them as 'irresponsible' and wanting the partition of the country. Just like the Phalangists, the Syrians tried to break the Palestinian-left coalition by pushing for a settlement between the resistance and the Phalangists. Having failed to do so, Syria attempted to emasculate the coalition immediately following the April Presidential election. Its propaganda target now including the leadership of the Palestinian Resistance ("leftists blindly leading the revolution to destruction"). The Syrian strategy was modelled on its experience in Jordan in 1970. As it had done in Jordan, Syrians now demanded that the left drop its arms in the interest of peace. The left, on the other hand, demanded that certain minimum democratic reforms be carried out before disarmament which should include both the left and the right. Aware that democratic reforms would bring certain political victory to the left, the right changed its methods once again. A Syrian blockade was now imposed on the supply of arms, food and money to either the left forces or the Resistance in Lebanon.

The Lebanese conflict entered its fourth stage with the direct invasion of the Syrian army. But before the Syrian army could invade it had to have American assurance that a Syrian invasion would not precipitate another by Israeli. In the preceding months, Syrian-Jordanian relations had warmed up and Hussein's Washington visit in May no doubt secured American approval for the invasion. While





# USHA ATLAS HYDRA

This is only an ann

Regd. Office : 14,

**Announcement regarding the Public Issue of 1,18,750 Equity Shares of Rs 10 each and subject to deduction of tax at source**

An application has been made to the Calcutta Stock Exchange for permission to deal  
The Subscription List will open at the commencement of banking hours on 28th July, 1975  
the Board of Directors of the Company but not

Application forms with copies of the Prospectus may be obtained from the Registered Office  
Issue or from any of the offices of the

## INCORPORATION AND ACTIVITIES

The Company was incorporated on the 21st May, 1975, in the State of West Bengal under the Companies Act, 1956 and obtained the Certificate of Entitlement to commence business from the Registrar of Companies, West Bengal on the 28th June, 1975.

The Company has been promoted by Usha Telehoist Limited. The promoters are one of the leading manufacturers of Hydraulic Tipping Gears, Hydraulic Pumps and Valves, Special Purpose Heavy Duty Hydraulic Cylinders and equipment for recovery Vehicles.

The Company proposes to undertake the manufacture of Truck Mounted Hydraulic Cranes and accessories thereof (excluding truck chassis) for which the Company has received an industrial Licence.

Barring unforeseen circumstances it is expected that the Company will be able to commence commercial production by the end of this year.

## LOCATION

The Company's factory will be located at Chandannagar, Maheshtalla near Budge Budge in West Bengal on land measuring 0.92 hectares (approx.) for the purchase of which the Company has entered into an agreement with Usha Telehoist Limited. The civil construction work of the Company's factory buildings and sheds is well under progress.

## FOREIGN COLLABORATION

The Company has entered into collaboration with Messrs. H. Weyhausen GmbH of West Germany whereby the latter will furnish the Company with technical data and other information appertaining or related to certain specified products including Truck Mounted Hydraulic Cranes and accessories thereof ("the specified products") and will grant to the Company the sole and exclusive right and licence to manufacture and sell in India the specified products under their patents and registered designs and the non-exclusive right and licence to sell the specified products under the same patents and designs to other countries subject to certain limitation. The foreign collaborators have also agreed to purchase 25% of the Company's annual production of the specified products subject to certain conditions.

## PRODUCT

Truck Mounted Hydraulic Crane (the Cranes) is an ideal self loader for trucks, trailers and similar vehicles. In all industrially advanced countries the concept has been very well accepted and demand continues to grow, in view of its proven superior performance and versatility over other conventional mechanical handling equipment. The Cranes will have a wide range of application for speedy handling/loading/unloading of heavy and bulky components, palletised goods, granular materials and various other items covering a wide range of industries, such as, Engineering, Transport, Construction, Mining, Defence, Forest, Paper and other Timber based industries, Irrigation and Power Projects, etc. The Cranes will be manufactured in India for the first time.

## BOARD OF DIRECTORS

**Mr. Mahendra Kumar Jhawar** (Industrialist)

(S/o. Mr. G. D. Jhawar)

51/E, Gariahat Road, Calcutta-700 019.

Managing Director of:

Usha Telehoist Limited

Director of:

Universal Electrics Ltd.

Hada Textile Industries Ltd., & other companies.

**Mr. Helmut Weyhausen** (Industrialist)

(S/o. Mr. Hinrich Weyhausen)

287, Delmenhorst Horster Weg 87, West Germany.

Chairman/Director of:

H. Weyhausen GmbH.

N.A.F. Neunkirchner Maschinen und

Achsenfabrik GmbH & Co. KG.

Iran Atlas Machinery Co. & other companies.

**Mr. Jochen Sauer** (Engineer)

(S/o. Mr. K. Sauer)

287, Delmenhorst, Deichweg 51, West Germany.

Director of:

H. Weyhausen GmbH.

N.A.F. Neunkirchner Maschinen und

Achsenfabrik GmbH & Co. KG. & other companies.

**Mr. Manfred Zettler** (Company Executive)

(S/o. Mr. H. Zettler)

287, Delmenhorst, Schoenemoorer Str. 91, West Germany.

Director of:

N.A.F. Neunkirchner Maschinen und

Achsenfabrik GmbH & Co. KG.

**Mr. Prem Nihar Basu** (Solicitor)

(S/o. Late S. Basu)

36/9, Sahitya Parishad Street, Calcutta-700 006.

Partner of:

Orr, Dignam & Co.

Director of:

Octavius Steel Co. Ltd. & other companies.

**Mr. Kunj Bihari Hada** (Industrialist)

(S/o. Mr. S. N. Hada)

20, Raja Santosh Road, Calcutta-700 027.

Managing Director of:

Hada Textile Industries Ltd.

Director of:

Indu Engineering & Textiles Ltd.

**Mr. Rasik Varjivan Jaitha** (Industrialist)

(S/o. Mr. V. P. Jaitha)

24, Ballygunge Circular Road, Calcutta-700 019.

Managing Director of:

G. Atherton & Co. Private Ltd.

Handyman Industries Private Ltd.

Light Leathers Private Ltd.

Director of:

Atherton Glass Works Ltd.

Kamarhatty Co. Ltd. & other companies.

**Mr. Rajendra Kumar Jhawar** (Industrialist)

(S/o. Mr. G. D. Jhawar)

51/E, Gariahat Road, Calcutta-700 019.

Director of:

Usha Telehoist Ltd.

## SHARE CAPITAL

### A. Authorised

5,00,000	Equity Shares of Rs. 10 each	Rs. 50.00.000
20,000	Preference Shares of Rs. 100 each	Rs. 20.00.000
		Rs. 70.00.000

### B. Issued, Subscribed and Paid-up :

70	Equity Shares of Rs. 10 each fully paid up subscribed by the subscribers to the Memorandum of Association of the Company	Rs. 700
14,930	Equity Shares of Rs. 10 each fully paid up subscribed by and allotted to the Directors and their nominees	Rs. 1.49.300
		Rs. 1.50.000

### C. Present Issue for Cash at par

2,35,000	Equity Shares of Rs. 10 each	Rs. 23.50.000
5,000	11% Redeemable Cumulative Preference Shares of Rs. 100 each (free of Company's tax but subject to deduction of tax at source at the prescribed rates)	Rs. 5.00.000
		Rs. 28.50.000

### D. Out of the Present Issue :

22,500	Equity Shares of Rs. 10 each have been kept reserved for allotment to Usha Telehoist Limited, the promoters of the Company for cash at par	Rs. 2.25.000
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ISSUE OPENS



# IC EQUIPMENT LIMITED

Street, Calcutta-700 072.

**% Redeemable Cumulative Preference Shares of Rs 100 each (free of Company's tax but prescribed rates) for cash at par.**

for an official quotation for the entire Equity and Preference Shares of the Company. will close at the close of banking hours on 7th August, 1976 or earlier at the discretion of the close of banking hours on 30th July, 1976.

ne Company, Underwriters, Brokers to the Issue, Managers to the Issue and Bankers to the rs to the Issue mentioned below.

93,750 Equity Shares of Rs. 10 each have been kept reserved for allotment to the foreign collaborators of the Company H. Weyhausen GmbH, West Germany for cash at par

Rs.	9,37,500
Rs.	11,62,500

## E. NOW OFFERED TO THE PUBLIC FOR SUBSCRIPTION FOR CASH AT PAR

1,18,750 Equity Shares of Rs. 10 each	Rs.	11,87,500
5,000 11% Redeemable Cumulative Preference Shares of Rs. 100 each (free of Company's tax but subject to deduction of tax at source at the prescribed rates)	Rs.	5,00,000
	Rs.	16,87,500

The Company has received from Usha Telehoist Ltd. and H. Weyhausen GmbH Rs. 2,25,000 and Rs. 9,37,500 respectively in respect of the shares reserved for them for allotment.

## TERMS OF PAYMENT

	Equity	Preference
On Application	Rs. 2.50 per share	Rs. 25 per share
On Allotment	Rs. 2.50 per share	Rs. 25 per share

The balance shall be payable in such call or calls as may be determined by the Board of Directors of the Company but so that no calls shall be made earlier than three months after the date of allotment of the shares or payable within three months of the last preceding call. Calls shall be made proportionately and simultaneously for both Equity Shares and Preference Shares.

Applications will be considered only from Indian Nationals resident in India and must be for a minimum of fifty shares or multiples thereof in case of Equity Shares and for a minimum of five shares or multiples thereof in case of Preference Shares.

## UNDERWRITERS

The entire issue presently offered for public subscription has been underwritten as under:

Name and address	Amount underwritten	
	Equity	Preference
	(Rs in Lakhs)	
The Industrial Credit and Investment Corporation of India Ltd., 163, Backbay Reclamation, Bombay-400 020	2.00	1.00
West Bengal Industrial Development Corporation Ltd., 23A, Netaji Subhas Road, Calcutta-700 001	3.00	1.00
New India Assurance Co. Ltd., 87, Mahatma Gandhi Road, Bombay-400 023	1.50	—
National Insurance Co. Ltd., 3, Middleton Street, Calcutta-700 071	—	1.50
The United India Fire & General Insurance Co. Ltd., UCO Bank Building, 13/16, Thambu Chetty Street, Madras-600 001	—	1.50
General Insurance Corporation of India, Industrial Assurance Building, Churchgate, Bombay-400 020	1.50	—

## UNDERWRITERS & BROKERS

Place Siddons & Gough (Private) Ltd., 6, Lyons Range, Calcutta-700 001	0.50	—
Stewart & Co., 14, India Exchange Place, Calcutta-700 001	0.50	—
Brijnath Khandelwal & Co., 13, India Exchange Place, Calcutta-700 001	0.50	—
Raja Ram Bhasin & Co., Jewan Mansion, 8/4, Desh Bandhu Gupta Road, New Delhi-110 005	0.50	—
Champaklal Bhailal Chokshi, Mamek Chowk, Near Share Bazar, Ahmedabad-380 001	0.50	—

Khandelwal Brothers, Wardley House, 25, Swallow Lane, Calcutta-700 001	0.275	—
G. M. Pyne, 14, India Exchange Place, Calcutta-700 001	0.25	—
M. Nanjappaiah Jahgirdar, 205, Cavalry Road, Bangalore-560 042	0.25	—
Dayco, 7, Lyons Range, Calcutta-700 001	0.20	—
Batlivala & Karani, Union Bank Building, Dalal Street, Fort, Bombay-400 023	0.20	—
Valji Bhimji & Co., 24, Stock Exchange Central Building, Dalal Street, Fort, Bombay-400 023	0.20	—

## OTHER BROKERS

Bhupendra Champaklal Devidas, Bhupen Chambers, Fort Bombay-400 023. D. S. Purbhoo Das & Co., Stock Exchange Building, Apollo Street, Fort, Bombay-400 023. N. L. Roy & Co., 7, Lyons Range, Calcutta-700 001. G. M. Bosu, 7, Lyons Range, Calcutta-700 001. Shyam Sunder Chiripal, 7, Lyons Range, Calcutta-700 001. Jhavar & Co., 7, Lyons Range, Calcutta-700 001. Sajjan K. Saraf, 7, Lyons Range, Calcutta-700 001. P. B. Afzulpurkar, 4-5-195, Sultan Bazar, Hyderabad-500 001. Pushkarlal Ghudawala, 44, Bada Sarafa, Indore-452 002. Kothari & Sons, 'Kothari Buildings', Nungambakkam High Road, Madras-600 034. Jalan & Co., Stock Exchange Building, Asaf Ali Road, New Delhi-110 001.

## MANAGERS TO THE ISSUE:

Grindlays Bank Limited, Merchant Banking Division, 19, Netaji Subhas Road, Calcutta-700 001.

## BANKERS TO THE ISSUE:

Syndicate Bank, 6, Netaji Subhas Road, Calcutta-700 001. Or any of their main branches at Ahmedabad; Bangalore; Bhopal; Bombay; Indore; Lucknow; Madras; Nagpur; New Delhi; Secunderabad; Surat; Visakhapatnam. Canara Bank, P-25, Princep Street, Calcutta-700 072. Or any of their main branches at Ahmedabad; Agra, Bangalore; Bhopal; Bhubaneswar; Bombay; Gwalior; Indore; Lucknow; Madras; Nagpur; New Delhi; Patna; Raipur; Ranchi; Secunderabad; Surat; Visakhapatnam.

Grindlays Bank Limited, 19, Netaji Subhas Road, Calcutta-700 001. Or their offices at Amritsar; Gandhi Bazar; Bangalore; Bombay: 270/272 D. N. Road; Hyderabad; Kanpur; Madras: 378, N. S. C. Bose Road; New Delhi: 10 Parliament Street.

## BANKERS TO THE COMPANY:

Syndicate Bank, 6, Netaji Subhas Road, Calcutta-700 001. Canara Bank, 25, Princep Street, Calcutta-700 072. Allahabad Bank, Stephen House, 8, B.B.D. Bagh East, Calcutta-700 001.

## AUDITORS:

Price Waterhouse, Peat & Co., B4, Gillander House, Netaji Subhas Road, Calcutta-700 001.

## SOLICITORS:

Orr, Dignam & Co., 29, Netaji Subhas Road, Calcutta-700 001.

## ISSUE MANAGED BY



**Grindlays Bank Limited**  
MERCHANT BANKING DIVISION  
19, Netaji Subhas Road  
Calcutta 700 001



President Ford lauded Syria's "constructive role" in Lebanon, the Israelis went a step further. At the time of the Palestinian operation against the Savoy Hotel in Tel Aviv in March, Israeli Prime Minister Rabin had commented that internal developments in Lebanon would reply to the matter. In June, Rabin went so far as to thank the Syrian army for having killed more Palestinians in two weeks than the Israeli army had managed to kill in years. The Syrian invasion in support of the Lebanese rightists cannot be abstracted from the role of American imperialism for its objective significance was to pave the way for an imperialist peace in the Middle East.

#### SOVIET POSITION

While the American super power was a major party to the Syrian invasion, it signified yet another setback for the Soviet Union. Not that the Soviet Union was opposed to an invasion in principle, only to one under American auspices. Kosygin's May communique in Baghdad clearly stated that the Lebanese conflict was an internal affair. Russian relations with Syria have deteriorated since March of this year. Only a day before the invasion, Kosygin arrived in Damascus and the joint Soviet-Syrian communique issued at his departure made no mention of the invasion. While the Soviet Union earlier on encouraged the anti-Syrian posture of the Lebanese Communist Party, they clearly took exception to it later, for the Lebanese Communist Party went on to denounce the Soviet Union for its tacit approval of Syrian invasion.

For the short-lived stay of the invasionary forces, there were two reasons. Well reported in the capitalist press was the diplomatic isolation of the Syrian regime in the Arab world. Not so well publicised has been the internal opposition within Syria which in fact found expression in the ranks of the Baathist party. Hundreds of party members at the local levels, leading cadres of the left wing of the party, were thrown into jail. While the most "reliable" units in the army had been sent to Lebanon, the changing internal situation necessitated their speedy recall.

#### JOINT ARAB FORCE

The introduction of a joint Arab force in Lebanon signifies a furious

rivalry among Arab states over the control of war-torn Lebanon and agreement over at least one issue: that Syria is not to monopolise the fruits of the Lebanese crisis. But the joint-Arab force is also the result of the pressure put on leaders by the Arab peoples. Ever since the establishment of the state of Israel, Arab leaders for their own interests identified imperialism with Zionism and thus anti-imperialism with anti-Zionism. But an objective consequence of this was also an identification of the Palestinian revolution with Arab liberation. The result has been that at every point when the Palestinian Resistance has been faced with an imperialist onslaught, the Arab popular forces have unfailingly given it the support their organisational development allowed. Thus, at the time of the Jordanian Black September, while Arab leaders including Nasser, quietly wit-

nessed the massacre of Palestinians, it was the Arab masses expressing themselves in popular demonstrations that brought a cessation to the massacres and the calling of the Cairo Conference. Such has also been the case this time.

Reactionaries exaggerate the present strength of the imperialists and their local allies by eternalising the present. For them history does not exist. But a comparison of Jordan 1970 and Lebanon 1976 shows that revolutionary forces, provided they persist in struggle, use the correct methods and have the courage to take the initiatives at decisive moments, are capable of growing daily. As the science of history teaches us, revolutionary forces represent the rising forces of the people. Armed ideologically and organisationally, they are capable of defeating the decadent forces of reaction. Such is the lesson of Lebanon.

## REVIEW

### Production Relations in Indian Agriculture

Kalyan K Sanyal

**Production Conditions in Indian Agriculture** by Krishna Bharadwaj; Cambridge University Press, 1974; pp 128; Rs 40.

THE proper theoretical structure for analysing the problems of Indian agriculture has been a controversial issue among economists for quite some time. The crusade is mainly against the neoclassical way of looking at things on the basis of competitive market relations. Curiously, some such crusaders are themselves often found to rely implicitly on the neoclassical tools. However, these days it is increasingly clear that analysis based on competitive market relations can hardly explain the complex economic reality of an underdeveloped economy like India. Krishna Bharadwaj, in the introductory chapter of her book, states categorically that she has no inclination for such theorisation.

In the usual neoclassical approach, the input markets are considered to be competitive ones, where input prices are determined by the scissors of demand and supply. Productive efficiency is characterised by the equalisation of the marginal productivity of a particular input along all lines of production and of the value of its marginal

product to the price of the input. The production function is assumed to be one of the most convenient ones, having the most convenient properties. Other dodges are also resorted to. The use of fertiliser for example, is incorporated in the production function as a land augmenting technical progress, and the differences in the bargaining positions of the different sections of the peasantry are reflected through a difference in price they pay for fertilisers. Thus the analysis of production in agriculture is based only on the technical relationship between inputs and outputs. The whole social reality, the neoclassicists argue, is taken into consideration while characterising the input markets.

When it is impossible to sustain the myth about the competitive character of the market, imperfection is brought in a neoclassical style. An important illustration of this style is that the pressure of surplus labour is reflected in a horizontal supply curve of labour and concurrently high rates of interest on loans are explained by excess demand in the loan market and frictional



difficulties in price adjustment. If the money-lender dictates the interest rate, it is argued, that the rate is high because the administrative cost to the money-lender is high, and hence the supply price is high. It is often followed by policy suggestions to make the credit market effectively more imperfect so that each money-lender, thus in command over a larger number of borrowers, may be able to operate more efficiently by using his administrative capacity to the full and thus supply price will fall. Peasant behaviour is assumed to be guided by a utility function (with, say, leisure and agricultural output as the arguments) where the first derivative is positive and the second derivative negative and so on. A poor peasant is characterised by the property that the second derivative of his utility function is zero. A rational decision on the part of the peasant follows from his choice regarding labour and leisure while attempting to maximise utility. Starting from these decisions of the individuals, and on the basis of individual utility functions and common production functions, the neoclassicists argue, the whole process of economic activities can be explained.

Krishna Bharadwaj points out that the rural markets are interlocked through price and non-price links. The involvement of any economic agent in the market is guided by his resource position and bargaining position *vis-a-vis* the others. The bargaining position depends, among other things, on his socio-economic and political coordinates. The exploitation of the section having weaker bargaining power by those who are stronger, is based on this chain of interconnected markets. The whole process of exploitation is phased over these markets and, over a period of time. This makes it impossible to analyse the markets separately. So the whole surplus generation mechanism or the mode of production has to be analysed on the basis of the fact that the behaviour of the economic agents is often guided by factors which do not fit in with the standard neoclassical economic categories.

The author accepts this premise as her starting point. She tries to explain certain observed relationships between economic categories obtained from Farm Management Survey (FMS) data in terms of the complex character of markets. She starts from the relationship between size of holding and productivity and then tries to analyse what determines the extent of input use in farms of different sizes, the cropping

pattern and the effect of irrigation. The book also includes a chapter on tenurial conditions where market relations are brought in sharply and explicitly. All these are used to arrive at an explanation of the economic reality of Indian agriculture.

The inverse relationship between size of holding and productivity is an issue over which economists have fought for a long time. Both theoretical and empirical support have been put forward for and against the hypothesis. Analysis is often followed by policy suggestions whether to break up the big farms into small farms or the other way round. But the whole debate seems to be slightly wrong-headed because production in big farms and in small farms are dimensionally different. While in one production is at least partly for the market in the other production is mainly for subsistence. There is a difference in the logic of production and the productivity differential does not warrant any mechanical policy suggestions. The proper way of handling this problem is to analyse how the position of the small farmer in the rural economy and the pressures under which he has to operate determine the extent of input use and lead to the productivity differential.

The difference does not simply mean the extent of use of hired labour or involvement in market for input. The small farmers may use hired labour or purchase input from the market. He may also produce cash crops extensively (this has been shown in the last chapter of the book). The main difference lies in the motivation of production and the pressures on production decisions. The big farmer is geared to the market where the use value of his product is transformed into exchange value and he can realise his surplus. The small farmer always tries to maintain his consumption level, and in order to do that he has to get involved in both input and output markets. The basic motivation of production in small farm is consumption, not surplus generation. The small farmer is always trying to catch up with a particular

level of production. He has to meet various obligations developed through his involvement in the input markets, with a weaker bargaining position. These obligations tend to push him below that consumption level: whatever apparent surplus he generates just suffices, if he is luckily, to keep him on that consumption line. On the other hand the big farmer aims at surplus maximisation and that is done by exploiting the small farms through the input markets. One is an exploiter and the other is exploited and hence they are not parts of the same spectrum with only different wave lengths.

There are cases where the market links between big farms and small farms are not so close. The dimensional difference in those cases would be due to the technological superiority, greater access to the marketing facilities etc. The exploiter-exploited relationship, though not very explicit, can be found to give shape to the economic reality implicitly. What all this means is that the dynamics of the system in these two cases are different. This is a qualitative difference which forms the completely different logic of the economic reality in these two cases.

This is the logic that Krishna Bharadwaj has tried to unravel. On the basis of FMS data she has found that an inverse relationship exists between size of the holding and productivity when total crop production activity is taken; but no systematic relationship is there in case of individual crops. In order to explain this observed paradox she shows why the explanation of productivity differential based on qualitative difference in inputs is not acceptable. The important variables here are the intensity of input use and crop-pattern which differ between large and small farms. Then she tries to relate labour use and size of the holding and finds that the inverse relationship holds when total crop activity is taken but not in case of individual crops. This, she suggests, adds to the importance of the intensity of land use and crop-pattern because the extent of labour

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use is dependent on that of land and the choice of the crop mix.

Here one may be tempted to raise a point. The extent of labour use in small farms is likely to be greater independently of the intensity of land use since the opportunity cost of family labour is undoubtedly very low owing to the existence of unemployment. The author has related the extent of labour use with the intensity of land use and choice of labour-absorbing crops but the extent of labour use would have been greater for small farmers even if the intensity of cropping and crop-mix were not important. However, this does not affect the author's conclusion. She then brings in the labour market and shows that the concept of labour market based on categories like family labour and hired labour and single wage rate is very unrealistic since it is very difficult to say how far the different types of labour are substitutes or complements. That is why to impute market wage rate to family labour is not permitted. In fact, this method in most cases has led to peculiar conclusions like net loss for most of the small farms year after year.

Besides human labour the use of bullock labour is also found to be more intensive in small farms. That, as it has been argued by the author, is due to the complementarity of human labour and bullock labour and to some extent due to the indivisibility of the input.

Discussing the effect of irrigation, the author has pointed out that the resource position of the economic agent determines the distribution of irrigation facilities over farms of different size. The landlord may lease out his irrigated land to the petty tenants in tiny plots because the intensive use of the other inputs is already ensured in the small farms. As to the question of construction and maintenance of these facilities, the small farms, according to the author are in a better position since they have plenty of family labour. Here the author has talked in terms of small farms but she has not made it clear whether the land is owned or leased in. The entire attitude towards construction and maintenance of fixed capital would be different in the two cases. In fact this difference is also important in analysing the labour market because the nature of the involvement of the small owner cultivator and small tenant cultivator in the labour market is likely to be different.

The last two chapters are on tenuous conditions and crop-pattern. The discussion on tenancy is based on the information from published FMS. The nature and the type of tenancy are different in different regions and the FMS information is scanty; hence the author is cautious regarding generalisations. The fact that cultivation is more intensive in small farms induces the landlord to lease out his land on crop-sharing basis so that he can get a part of the gain from the productivity differential. But on the other hand the cropsharing system may discourage the tenant from using land and labour intensively. In that case the landlord may charge very high fixed rent to get a part of the gain from intensive cultivation. All these propositions are logically correct. But what I do not understand is why the landlord, if he has irrigated land, leases it out at all: he can cultivate it, using better seeds and better equipment to which he has greater access than the tenant. He can produce for the market, being guided by the profit motive. We have to find reasons as to why he prefers to lease out land and show that leasing out is more profitable to him rather than production for the market on own account. The impact of the availability of new technology on tenancy structure has to be analysed. The fact that it has not been able to change the method of surplus extraction based on the structure of tenancy calls for explanation.

The chapter on crop pattern is interesting. The farmers have been divided among four groups based on their market involvement. The very small farmer has to devote a larger part of his land to cash crops for his dependence of cash expenditure. The small farmer, because he has a slightly stronger bargaining position concentrates on subsistence crops. The middle cultivator chooses a mix while the big cultivator produces either sturdy but low valued crops or high value cash

crops depending on the extent of irrigation.

The book is an honest and successful attempt to explain the forces behind production in agriculture and how these forces determine the logic of the existing production relations. Having said this one also has a few critical remarks to make. The analysis of the observed relationships should have been based more on the chain of interlocked markets over which the whole surplus generation mechanism is based. The completely different style of theorisation which the author put forward as her starting point in the introduction has not been fully taken up in the subsequent chapters. The productivity differential between small and big farms, from which the whole account started, should have been analysed by taking small and big farms together and their relationships through the input markets. In fact, the productivity in small farms and that in big farms are not independent of each other. Small farms with intensive cultivation and crop-mix tilted in favour of cash crops, and big farms with less intensive cultivation are two parts of the same story. This is an optimum situation from the point of view of the exploiting classes. More detailed analysis of the credit market and marketing of final output would have shown how the gain from higher productivity in small farms finally goes to the big farmers. The big farmers can afford to have this productivity differential since they have other modes of exploitation through which they can exploit the more efficient small farms. That is partly why the ingestion of new technology fails to alter the picture radically in most of the cases. All these are parts of a single process. The book has not paid adequate attention to the big farms and open ends remain. Had these links between small and big farms been explained in detail, the totality of the situation could have been understood better.

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# Family Size, Consumption Expenditure, Income, and Land Holding in an Agrarian Economy

## A Critique of Some Populist Notions

S S Sivakumar

*An attempt is made here to understand the relationship between family size, consumption expenditure, income, and land holdings, among the peasantry in some villages in Tamil Nadu. This is done with a view to testing empirically some major populist formulations.*

*Part I of this article briefly evaluates populist economic policy formulations for the development of agriculture in general.*

*Part II highlights the major theoretical formulations on which the above policy formulations rest.*

*Part III considers data from some villages in Tamil Nadu in the light of the above theoretical formulations.*

*Finally, Part IV evaluates the correctness of populist formulations in the empirical context provided by the villages studied.*

### I

#### Populist Policy Formulations

IN recent times, a view has emerged<sup>1</sup> that capitalism and collectivism (socialism) are not the only alternative paths of agrarian development that are open to the economies of the third world.<sup>2</sup>

It is, for instance, argued that, "the main alternatives which face policy makers are three: (a) 'Betting on the strong', as against 'betting' on the mass, i.e., the attempt to reform or advance agriculture by concentrating on a chosen few supposedly the ablest and the wealthiest, as against an attempt at a slower advance of the bulk of the peasants. (b) Aiming at large-scale farming as against aiming at family farming, based on belief in the advantages of a large-scale agricultural enterprise as against belief in the preference of family farms. (c) Building up an interactive as against a directive economic system, i.e., a system based on voluntarist and partial association as against one which assumes a high extent of centralised, national, possibly State control. The main models of organisation actually adopted in such policies can be divided into those of a capitalist enterprise, a collective or State enterprise, and a small family farm . . . . 'Western like' capitalism, Soviet or China-like socialism, and the populism of, say, contemporary Tanzania, respectively".<sup>3</sup>

Thus the three models are: large-scale capitalist farming, large-scale collective farming, and small and medium

sized family farming. The third alternative is posed as the best possible one. "It means betting on the mass, based on an egalitarian ideology, but also on the claim of the economic preferences of family farming."<sup>4</sup>

This populist viewpoint is in fact a re-statement of the orthodox Russian population (Narodism) of the last quarter of the nineteenth century and the first twenty years of twentieth century. In the first two decades of the twentieth century, the Russian Narodnik organisations such as the Trudoviks, the Popular Socialists, and the Peasants' Party attempted a continuous compromise with the Bolsheviks on the issue of land reform. The critical issue with them was the proliferation, under state protection, of the Dadniak and

Seredniak (small and medium peasants).<sup>5</sup> In other words, a mixture of operational agrarian *laissez-faire* and regulatory planning. Like Shanin's views above, the Russian Narodniks also asserted the possibility of the third path. One of the greatest architects of this viewpoint was A V Chayanov the Moscow economist of the 1920s.<sup>6</sup> It was Chayanov who pointed out the need for a combination of planning and *laissez-faire* in agrarian development.<sup>7</sup> In fact, the major inspiration for the neo-populism of Thorner, Shanin and others, may be said to emerge from Chayanov's works.<sup>8</sup>

The rationale of this view is offered in another of Chayanov's views which has been adopted by the neo-Narodniks — such as Shanin. This view is

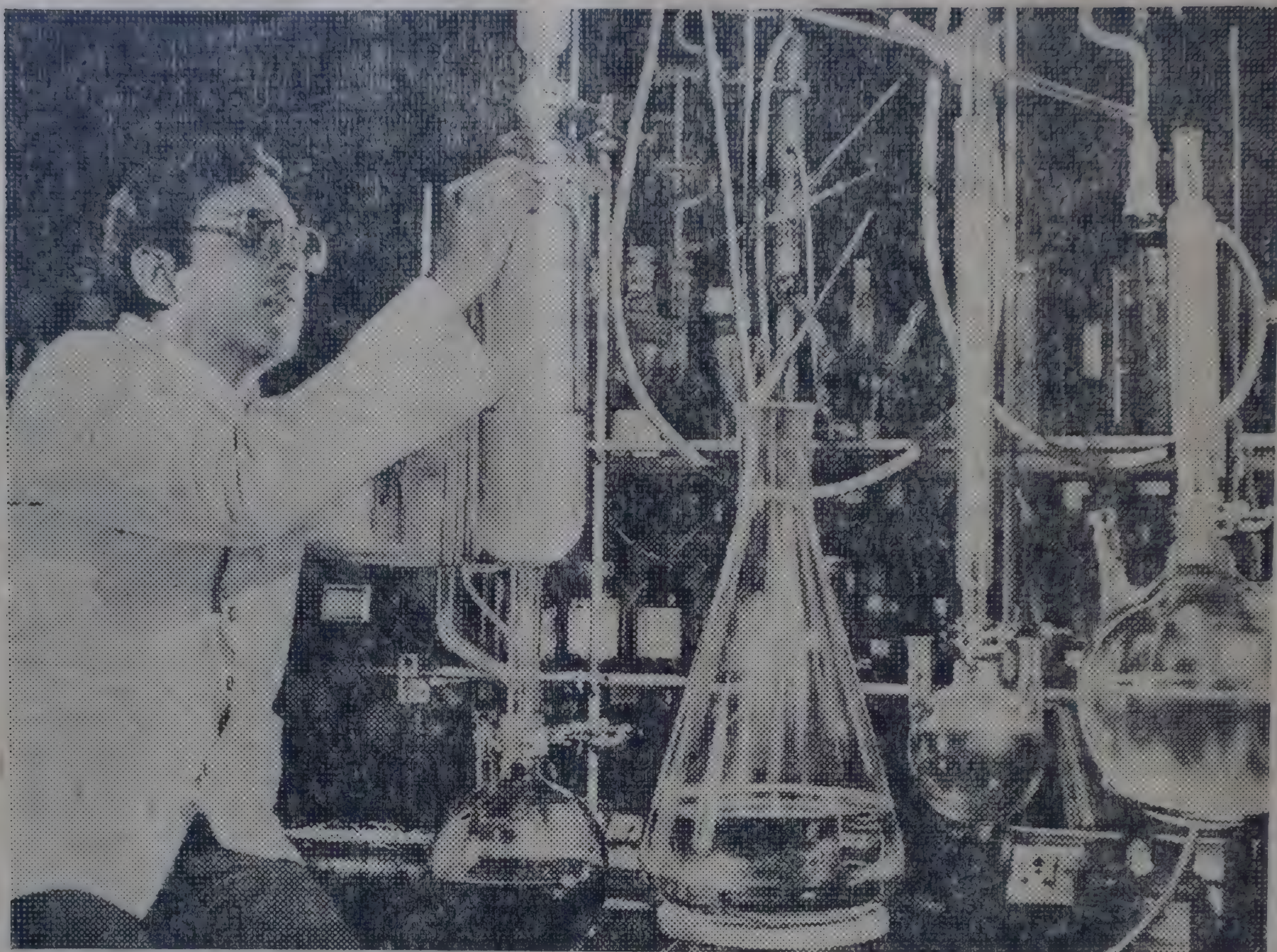
TABLE 1 : VOLUME OF ECONOMIC ACTIVITY AND FAMILY SIZE<sup>23</sup>

(Per farm)

VYATKA Guberniya <sup>24</sup>			TULA Guberniya			POLTAVA Guberniya		
Sown Area (desyatina)	Suitable Land (desyatina)	Persons of Both Sexes	Sown Area (desyatina)	Suitable Land (desyatina)	Persons of Both Sexes	Sown Area (desyatina)	Suitable Land (desyatina)	Persons of Both Sexes
0	1.2	2.8	0	0	1.0	0	0	3.5
0-1	4.5	3.5	0-1	0.4	3.4	0-3	1.8	4.4
1-2.5	8.9	4.4	1-2	1.4	4.4	3-6	4.5	5.2
2.5-5	12.6	5.3	2-5	3.4	6.2	6-9	7.5	6.1
5-7.5	16.6	6.2	5-10	6.9	8.4	9-12	10.5	6.9
7.5-10	21.0	7.2	10-15	11.0	11.0	12-15	13.5	7.5
10-15	27.7	8.6	15-25	17.7	12.6	15-20	17.4	8.2
15-20	36.5	10.7	25	43.9	14.4	20-30	24.1	9.4
20	51.2	12.8				30-40	34.2	10.9
						40	65.9	13.0



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the Marxian theory about the historical evolution of a society is not valid. Moreover Marx — it is claimed by this view — overlooked the existence of an economic formation known as the 'peasant economy'.<sup>9</sup> According to Daniel Thorner, the contemporary populist, peasant economy is "a system of production",<sup>10</sup> quite distinct from "other historical systems, such as slavery, capitalism, and socialism".<sup>11</sup> Thus, the neo-populism of the 1960s and 1970s owes its origins to the Russian populism of the late nineteenth and early twentieth centuries — and to Chayanov in particular.

To understand the policy formulations of neo-populism, it is necessary to go back to the character of Russian populism.

The Russian populism of the nineteenth century was a broad current of opinion rather than a single cogent scheme of thought. Though varied, this current of opinion had certain broad distinguishing characteristics.

First, most populist groups comprised radical elements of the urban bourgeoisie.

Secondly, their emotional energies were more or less channelled into opposition to the Tsarist regime. Most populists were romantic nationalists. Capitalism was to them no more than an distinguishing characteristics.

Last, but most important of all, was the dialectical relationship between populism and Marxism. Most Russian populists were considerably impressed and influenced by the Russian edition of "Das Kapital" which appeared in Russia in the 1860s. Some of them were, in fact, in continuous correspondence with Marx and Engels. One populist, Vera Zasulich, for example, corresponded with Marx on the question of the inevitability of capitalism in Russia. However, in subsequent periods, populists were also to turn violently anti-Marxist, when the radicalism of the Bolsheviks went far beyond anything dreamt by even populist terrorists — such as Tkachev. The differences between the populists and the Marxists became most pronounced when Lenin became a significant force. It was during the first decade of the twentieth century, that populism became once for all distinct from Marxism. By that time, the following characteristics had become standard populist ones:

(i) An attitude to capitalism that was romantic rather than analytical. While the populists scorned capitalism, their attitude remained purely

TABLE 2 : WORKER'S OUTPUT, CONSUMER'S PERSONAL BUDGET RELATED TO C/W RATIO AND LAND HELD<sup>26</sup>

C/W Ratio Arable Per Worker (desyatina)	Worker's Output			Consumer's Personal Budget		
	1.00-1.30	1.31-1.60	1.61-	1.00-1.30	1.31-1.60	1.61-
0.0-2.0	76.4	106.3	107.8	71.1	75.2	71.8
2.1-3.0	103.5	125.8	136.6	85.1	87.8	72.7
3.1-	105.1	128.6	175.8	86.3	85.9	88.7

TABLE 3 : FAMILY WORKER'S OUTPUT AS RELATED TO C/W RATIO IN DIFFERENT AREAS IN RUSSIA

Strobelsk Uezd, Kharkhov Guberniya	C/W	1.00-1.15	1.16-1.30	1.31-1.45	1.46-1.60	1.61-00
	Worker's Output (roubles)	68.1	99.0	118.3	128.9	156.4
Novgorod Guberniya	C/W	1.00-1.25	1.26-1.50	1.51-00		
	Worker's Output (roubles)	91.56	106.95	122.64		
Vologda Uezd, Vologda Guberniya	C/W	1.01-1.15	1.16-1.30	1.31-1.45	1.46-1.60	1.61-00
	Worker's Output (roubles)	63.9	79.1	84.4	91.7	117.9
Velsk Uezd, Vologda Guberniya	C/W	1.01-1.15	1.16-1.30	1.31-1.45	1.46-1.60	1.61-00
	Worker's Output (roubles)	59.2	61.2	76.1	79.5	95.5

TABLE 4 : DISTRIBUTION OF SELECT HOUSEHOLDS ACCORDING TO FAMILY SIZE AND INCOME—ANUR VILLAGE

Family Size	Income									Total
	0- 500	501- 750	751- 1000	1001- 2000	2001- 5000	5001- 10000	10001- 20000	20001- 00		
1-3	5	2	2	6	3	2	3	1		24
4-6	2	3	8	17	12	1	—	1		44
7-9	—	1	2	3	6	2	1	—		15
10-12	—	—	—	1	2	1	—	1		5
13-00	—	—	—	1	1	—	—	—		2
Total	7	6	12	28	24	6	4	3		90

ethico-aesthetic; whereas the Marxists looked upon capitalism as an aspect of history. Thus, for instance, the famous populist Mikhailovsky could declaim, "Despite all his tendentiousness Marx does not bring into the theoretical part of his studies any ethical or moral moments".<sup>12</sup> Perhaps the most apt comment on this difference came from Lenin: "...the profoundest cause of disagreement with the Narodniks is the difference in our fundamental views on social and economic processes. When studying the latter, the Narodnik usually draws conclusions that point to some moral; he does not regard the diverse groups of persons taking part in production... as creators of various forms of life; he does not

set out to present the sum-total of social and economic relationships... which have different historic roles."<sup>13</sup>

(ii) Populist romanticism extended much beyond their hatred of capitalism, into their glorification of the 'masses'. To the Marxists the 'masses' were identifiable in terms of the class composition of a society; to the populists the 'masses' were amorphous and faceless — and their object of love thus invariably was a kulak in the garb of a muzhik. Such a sentiment is evident in Mikhailovsky: "We have come to the conclusion that we are debtors of the people... the debt lies in our conscience and we long to discharge it".<sup>14</sup>

(iii) The most concrete manifestation of populist romanticism was their wor-



TABLE 5 : DISTRIBUTION OF HOUSEHOLDS ACCORDING TO FAMILY SIZE AND INCOME—ORATHI VILLAGE

Family Size \ Income	0-500	501-1000	1001-2000	2001-5000	5001-10000	10000-00	Total
1-3	—	—	—	—	—	—	—
4-6	5	2	—	—	1	—	8
7-9	—	—	—	1	1	2	4
9-12	—	—	—	—	2	—	2
13-00	—	—	—	—	—	—	—
Total	5	2	—	1	4	2	14

TABLE 6 : DISTRIBUTION OF HOUSEHOLDS ACCORDING TO FAMILY SIZE AND INCOME—KALYANAPURAM VILLAGE

Family Size \ Income	0-500	501-1000	1001-2000	2001-5000	5001-10000	10001-00	Total
1-3	1	—	—	—	—	—	1
4-6	2	—	—	—	1	1	4
7-9	1	—	—	—	1	—	2
10-12	—	—	—	1	2	—	3
13-00	1	—	—	—	—	1	2
Total	5	—	—	1	4	2	12

TABLE 7 : DISTRIBUTION OF SELECT HOUSEHOLDS ACCORDING TO FAMILY SIZE AND INCOME—CHOLAVARAM VILLAGE

Family Size \ Income	0-500	501-1000	1001-2000	2001-5000	5001-10000	10001-00	Total
1-3	—	—	—	—	—	—	—
4-6	3	—	1	2	—	—	6
7-9	1	—	—	—	3	2	6
10-12	—	—	—	—	—	—	—
13-00	—	—	—	—	—	—	—
Total	4	—	1	2	3	2	12

TABLE 8 : DISTRIBUTION OF SELECT HOUSEHOLDS ACCORDING TO FAMILY SIZE AND OCCUPATIONAL HOLDING—ANUR VILLAGE

Family Size \ Occupational Holding (acres)	0-2	2-5	5-10	10-20	20-00	Total
1-3	17	3	2	1	1	24
4-6	31	16	2	1	1	51
7-9	8	4	3	1	—	16
10-12	1	2	1	—	—	4
13-00	1	1	—	—	—	2
Total	58	26	8	3	2	97

ship of the long-lost Russian village community: the 'obshchina' or the 'mir'. Said V S Prugavin a St Petersburg economist of the late nineteenth century: "Let us go to the village....Let us gather together all who believe in the people....Only there, amidst the great people in the village, in the obs-

china, can salvation and reason be found".<sup>15</sup> On the other hand, Lenin did not consider the obshchina to be a monolith. To him, the grass-roots level contradictions of Russian society were to be found in obshchina — the contradiction between the growing capitalist interests, on the one hand, and the

impoverished muzhik, on the other: "What is particularly important from our point of view", writes Lenin about Narodnik economists, "is their ignoring the capitalist contradictions in the structure of peasant economy".<sup>16</sup>

(iv) The final point of divergence between the Marxists and the Narodniks came when the possibility of the overthrow of the Tsar was becoming more definite. The Narodnik position on land reform during 1916-17 characterised their own limitations *vis-a-vis* the Bolsheviks. The Narodniks went along with the Socialist programme of redistribution — but that was about all. To them it was sufficient to resurrect the medium and small peasants and protect them, whereas to Lenin and the Bolsheviks, it was "ridiculous to talk of socialism as long as market exchange remained."<sup>17</sup>

It is thus evident that orthodox Russian populism was at best radical articulation but with little radical intent. Though it was influenced by Marx in the earlier stages, its basic character was anti-Marxist. Indeed, the reluctance of the populists to enact egalitarianism is best illustrated in the worries of Chayanov; while the Soviet New Economic Policy (NEP) was well on way, he was worried still about the "political and social tensions of collectivisation".<sup>18</sup> It is not surprising, therefore, to see similar fears being articulated by his successors of the 1960s and 70s.<sup>19</sup> Their basic anti-Marxist position is well illustrated in the attempts of Thorner to proclaim the 'peasant economy' as an 'economic system' and in Shanin's attempt to proclaim the 'pro-family-farm' perspective as 'interactive' and 'voluntarist' rather than 'directive' under 'State control'. We have also seen how these assertions of Thorner, Shanin, etc., are basically inspired by Chayanov's formulations.

There are three methods for examining the validity of these neo-populist assertions.

One way is to examine the hypothesis that the salvation of the present-day underdeveloped economies of Asia, Africa, and Latin America lies through government policy encouraging the small and medium sized farms.

A second way would be to study the objective conditions — the international political and economic ecology — under which neo-populism has asserted itself, and then to relate its



articulation with that under other objective conditions.

The third way is to analyse the basic theoretical nucleus of neo-populism and verify it empirically.)

We shall for the present follow the third method, as that appears to be the most fundamental line of enquiry. But this does not belittle the significance of the first and second methods. For, the relevance of ideas rests not merely on the validity of their structure but also on the viability of these ideas in their context. The author hopes that he will be able to pursue the other two methods of enquiry in subsequent works. Thus, in what follows, we shall attempt to understand the essential theoretical formulations of Chayanov, from whom emerges the inspiration of the current neo-populism.

## II

### Theoretical Formulations of Chayanov

Chayanov's work consist of two parts. In the first part, he argues that it is theoretically possible for a number of economic systems to exist concurrently with one another and that the 'peasant economy' is the major economic system prevailing in under-developed economies.<sup>20</sup>

In the second part, Chayanov studies the functioning of the peasant economy through its basic micro-economic unit — viz, the family labour farm.<sup>21</sup>

In what follows, we shall consider the second part of Chayanov's work wherein he formulates concepts and economic behaviour patterns of the family labour farm.

The starting point of Chayanov's analysis is the postulate that the criteria for economic activity on the family labour farm are different from those under capitalist farming. According to him, while the capitalist farm functions to maximise its profit, there is no such maximising objective on the family labour farm. On the contrary, the family labour farm functions with a minimising objective — i.e, the objective of minimising the drudgery of work. Thus, while expansion of output and increase in productivity occurs under conditions of increasing profitability on a capitalist farm the same need not occur on a family labour farm. In particular, increment in labour productivity occurs only if, it simultaneously minimises the drudgery of labour.

TABLE 9 : DISTRIBUTION OF SELECT HOUSEHOLDS ACCORDING TO FAMILY SIZE AND OCCUPATIONAL HOLDING—RENGANATHAPURAM VILLAGE

Family Size	Occupational Holding (acres)	0-2	2-5	5-20	20-100	100-00	Total
1-3		2	—	—	—	—	2
4-6		2	1	2	—	1	6
7-9		—	—	—	1	1	2
10-12		—	—	—	1	—	1
13-00		—	—	—	—	—	—
Total		4	1	2	2	2	11

TABLE 10 : DISTRIBUTION OF SELECT HOUSEHOLDS ACCORDING TO FAMILY SIZE AND OCCUPATIONAL HOLDING—ORATHI VILLAGE

Family Size	Occupational Holdings acres	0-2	2-5	5-10	10-15	15-00	Total
1-3		—	—	—	—	—	—
4-6		7	—	1	—	—	8
7-9		1	1	—	1	1	4
10-12		—	—	1	1	—	2
13-00		—	—	—	—	—	—
Total		8	1	2	2	1	14

TABLE 11 : DISTRIBUTION OF SELECT HOUSEHOLDS ACCORDING TO OCCUPATIONAL HOLDING AND FAMILY SIZE—KALYANAPURAM VILLAGE

Family Size	Occupational Holdings (acres)	0-2	2-5	5-10	10-20	20-00	Total
1-3		1	1	—	—	—	2
4-6		2	—	—	2	—	4
7-9		1	—	—	—	—	1
10-12		—	1	2	—	—	3
13-00		1	—	—	—	1	2
Total		5	2	2	2	1	12

TABLE 12 : DISTRIBUTION OF SELECT HOUSEHOLDS ACCORDING TO CONSUMPTION EXPENDITURE AND FAMILY SIZE—ANUR VILLAGE

Family Size	Consumption Expenditure (Rs)	1000-1500	1500-2000	2000-3000	3000-5000	5000-00	Total
1-3		1	3	2	1	3	10
4-6		4	6	5	1	4	20
7-9		—	2	1	1	1	5
10-12		—	—	—	2	—	2
13-00		—	—	—	—	—	—
Total		5	11	8	5	8	37

Having thus postulated the objective of the family labour farm, Chayanov goes on to talk about the output target of the family labour farm. This output target is determined primarily by the gross consumption requirement of the family. This, Chayanov calls 'family consumer demand'. This 'family consumer demand', in turn, is

determined by (a) traditionally (i.e, socio-culturally) given per-capita consumption requirements, and (b) the composition and size of the family.

If we were to state it algebraically,

$$C = a \cdot n \quad \dots (i)$$

where C is the family consumer demand, a the socio-culturally given



TABLE 13 : DISTRIBUTION OF SELECT HOUSEHOLDS ACCORDING TO CONSUMPTION EXPENDITURE AND FAMILY SIZE—PERIYATHACHUR VILLAGE

Family Size	Consumption Expenditure (Rs)	100-500	500-1000	1000-2000	2000-5000	5000-00	Total
1-3		1	—	—	—	—	1
4-6		4	4	—	—	—	8
7-9		—	1	2	—	—	3
10-12		—	—	—	1	1	2
13-00		—	—	—	—	—	—
Total		5	5	2	1	1	14

TABLE 14 : DISTRIBUTION OF SELECT HOUSEHOLDS ACCORDING TO CONSUMPTION EXPENDITURE AND FAMILY SIZE—CHOLAVARAM VILLAGE

Family Size	Consumption Expenditure (Rs)	250-500	500-1000	1000-2000	2000-5000	5000-00	Total
1-3		—	—	—	—	—	—
4-6		3	1	2	—	—	6
7-9		1	—	—	5	—	6
10-12		—	—	—	—	—	—
13-00		—	—	—	—	—	—
Total		4	1	2	5	—	12

level of per adult consumption, and  $n$  the number of adult units in the family.

What is significant is that the basic economic determinant of family consumption demand is the size and composition of the family — i.e., the demographic factor.

The level of family consumer demand gives us the minimum limit for output on the family labour farm. As the output — or 'family labour product' — increases above this level it is subject to what Chayanov calls diminishing 'subjective' utility. In other words, Chayanov proceeds in very much the same direction as the neo-classical economists, asserting the occurrence of diminishing utility. However, he avoids the quantification problem of Marshall and others, by claiming that the family's calculation is qualitative or subjective and hence not amenable to exact measurement.<sup>22</sup>

Chayanov thus proceeds on the neo-classical line, without confronting its quantification problems. The two forces determining the exact level of the family labour farm's product are: the diminishing 'subjective' utility of family labour product, and the increasing drudgery of labour.

The amount of drudgery involved at any point of time depends upon the size and composition of the family.

Stating it algebraically once more we find:

$$D = (dl) n \dots (ii)$$

Wherein 'D' is the total 'subjective' estimate of drudgery in producing a certain amount of output, 'd' the subjective estimate of drudgery by each adult member of the family, 'l' the amount of labour involved per adult member for a particular level of output, and 'n' the number of adult units in the family. Considering that 'd', the estimate of drudgery, is 'subjectively' given, and that 'l' the required amount of labour is technologically, given 'n' the number of adult units becomes the major determinant of the family's estimate of drudgery. Once again, therefore, the key determinant is the demographic factor.

Thus the output target of the family labour farm falls within a range — the minimum level of which corresponds to the level of family consumer demand and the maximum level is the point where any further drudgery is considered not worthwhile.

The exact level of output emerges from interaction between these two forces. The amount of labour effort actually undertaken to achieve this level of output is referred to, by Chayanov, as the 'degree of self-exploitation'.

The whole scheme has been diagram-

matically illustrated by Chayanov in the case of a hypothetical family labour farm, as follows:

In Diagram 1 the abscissa measures the earnings of the farm. Chayanov does not mention what the ordinates indicate. We take it that it represents both the irksomeness of work as well as the marginal utility of income. AB indicates increasing subjective evaluation of the degree of drudgery attached to earning the marginal unit of output. CD represents diminishing marginal utility of income. 'X,' the point of equilibrium, gives us 'Y' the actual level of output that the farm will produce. Chayanov states this 'on farm equilibrium' algebraically as follows:

$$\frac{(GI - OM)}{L} \geq X \dots (iii)$$

Where GI is gross income, OM the outlay on materials, L the labour expenditure involved and X the subjective evaluation of drudgery. When the farm reaches its equilibrium:

$$\frac{(GI - OM)}{L} =$$

This micro-economic system can be better understood if we go into some of its dynamics. Let us, therefore, assume that the family labour farm is given interest-free credit by the government, in order that it may acquire better technology in the form of labour-saving machinery.

DIAGRAM 1

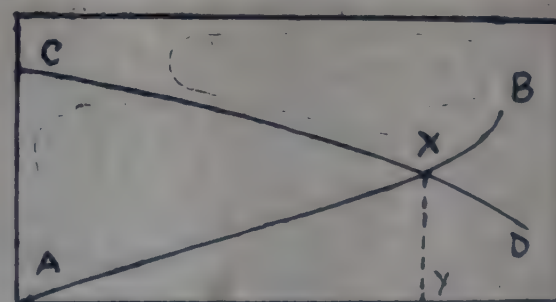
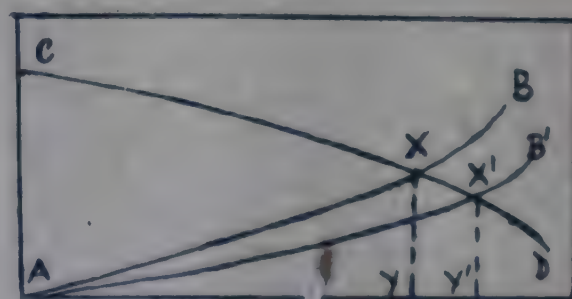


DIAGRAM 2





In Diagram 2 the original situation is illustrated by AB, CD, X and Y. Under the new situation, the curve indicating (increasing) drudgery of labour is no longer as steep, thanks to the labour-saving machinery. Thus, its new position is AB<sup>1</sup>. The new point of equilibrium is X<sup>1</sup> while the amount of drudgery is low. Thus, according to Chayanov, technological progress with interest free credit assures a cake for keeping as well as for eating: the family suffers less drudgery and its income goes up. Little wonder, then, that Chayanov and his present-day followers are such strong advocates of loans with little or no interest for agricultural innovations.

So far, we have briefly outlined the basic theoretical formulations of Chayanov. It has been seen that the degree of labour expenditure (or the degree of self-exploitation) and the family consumer demand are the key aspects of this model. Both are influenced, almost solely, by demographic factors.

Chayanov uses two indicators to study these demographic factors empirically. First, he directly relates family size with income and size of cultivated area. Secondly, he relates the family's consumer-worker ratio [C/W] to its income and size of cultivated area.

In Table 1, Chayanov establishes that in three guberniyas family size is positively associated with sown area.

Tables 2 and 3 relate the C/W ratio with output and land held and consumer's personal budgets.

Table 2 pertains to a guberniya where Chayanov found that with land holding remaining the same, an increase in C/W ratio led to a rise in worker's output. Maximum increase in both output and consumption budget occur when C/W ratio as well as land holding increase.

Table 3 illustrates Chayanov's point more clearly than the other ones do. In each of the uzeds above, an increase in C/W ratio is directly associated with higher levels of output.

We have seen, so far, the basic theoretical formulations of Chayanov and some of the data given by him to substantiate his formulations. The size and composition of the family clearly appear to play a dominant role in the agrarian economy of Russia. We shall now proceed to consider Chayanov's formulations in the light of data from some Indian villages.

TABLE 15 : DISTRIBUTION OF HOUSEHOLDS ACCORDING TO C/W RATIO AND CONSUMPTION DEMAND—ANUR VILLAGE

C/W \ Consumption Expenditure (Rs)	1000-1500	1500-2000	2000-3000	3000-5000	5000-00	Total
1.00-1.20	3	3	5	1	1	13
1.20-1.40	1	—	4	2	—	7
1.40-1.60	3	5	—	3	—	11
1.60-1.80	—	—	—	1	—	1
1.80-2.00	—	—	—	1	—	1
Total	7	8	9	8	1	33

TABLE 16 : INCOME, OCCUPATIONAL HOLDINGS AND CONSUMPTION EXPENDITURE AMONG DIFFERENT CLASSES OF PEASANT HOUSEHOLDS—ANUR VILLAGE

Class of Peasant Households	Income (Rs)	Occupational Holdings (acres)	Consumption Expenditure (Rs)
Big Peasants	67,500-85,400	50-65	4,500- 6,000
Medium Peasants	24,000-35,000	20-35	3,500- 6,000
Small Peasants	8,500-16,500	5-15	2,400- 5,900
Agricultural labourers	475- 3,000	—	750- 3,500
Tenant-cum-labourers	1,300- 2,750	0.33-4.00	1,300- 2,500

### III

#### Consumption Expenditure, Income, Occupational Holding, and Family Size in Some Indian Villages

In order to verify Chayanov's formulations, the author undertook a detailed field-study of a village in the Chingleput district of Tamil Nadu. Some of the findings are presented here. In addition, a good deal of relevant information has been called from the Village Survey Reports of the Agricultural Economics Research Centre, University of Madras.

The following are some of the villages under consideration.

(i) *Anur*: This village in the Chingleput taluk of Chingleput district was personally investigated by the author. It is irrigated primarily through tanks as is the case elsewhere in this district. The soil is primarily loamy. The population at the time of study in 1976 was about 1,300. The total cultivated area is about 950 acres.

(ii) *Ranganathapuram*:<sup>20</sup> This is a village in the Cuddalore taluk of the South Arcot district. Its irrigation is primarily from wells. The soil is sandy. The population of the village was 996 at the time of the study in 1958. The total cultivated area was 2,180 acres.

(iii) *Orathi*:<sup>30</sup> This village lies in the Maduranthakam taluk of Chingleput district. More than half its irrigation is from tanks, and about a-quarter

from wells. The soil is loamy. The population at the time of study during 1955-56 was 1,967 and the cultivated area was 1,871 acres.

(iv) *Dusi*:<sup>31</sup> This village is located in the Cheyyartaluk of North Arcot district. Irrigation is primarily from tanks. The total cultivated area in 1961-62, the year of study, was 755 acres.

(v) *Palur*:<sup>32</sup> Palur lies in the Chingleput taluk of Chingleput district. The population in 1955 was 4111. This village is well connected with the towns of Kanchipuram and Chingleput and thereby has a fairly high scope for interaction with the forces of market.

(vi) *Periyathachur*:<sup>33</sup> This is another large village, with a population of 2,982 (1959), and with both tank and well irrigation facilities. It lies in the Tindivanam taluk of the South Arcot district.

(vii) *Rajagambhiram*:<sup>34</sup> The total cultivable area in this village in 1959 was 1,032 acres, and its population was 2,065. It is irrigated by four tanks and the river Vaigai. It is located in Sivagangai taluk of Ramanathapuram district.

(viii) *Sengipaatti*:<sup>35</sup> Located in the Thanjavur Taluk of the Thanjavur district, this village was studied by the AER Centre, Madras, during 1958-59. Although the village possesses a tank and a lake, it is a predominantly dry farming village.



(ix) *Kalyanapuram*:<sup>36</sup> This village had a population of 4076 in 1960. Total cultivated area was 1,082 acres. It is located in the rich paddy cultivating section of the Thanjavur taluk of Thanjavur district.

(x) *Cholavaram*:<sup>37</sup> This is a large village. In the year survey (1956), it had a population of 2,669. Its total cultivated area then was 1,130.46 acres. Irrigated by a perennial tank a number of wells, this is a prosperous village which is very close to Madras city.

(xi) *Varadagareddypatti*:<sup>38</sup> Located in Srivaigundam taluk of Tinneveli district, Varadagareddypatti is a former Zamindari village. All other villages taken up by us are Ryotwari villages. In 1951, it had a population of 1211. The primary source of irrigation is a large tank.

(xii) *Keeranatham*:<sup>39</sup> Keeranatham is in the Coimbatore taluk of Coimbatore district. Its main source of irrigation, as elsewhere in the district, are wells. When surveyed in 1961, this village had a population of 3,268.

Thus we have relevant information on 12 villages. However, the most detailed information is available for Anur, where the author himself conducted field-investigation.

Table 4 pertains to the distribution of 90 households in Anur among different family sizes and income groups. It reveals little or no association between family size and income. In fact, the highest income groups have small or medium sized families.

Similar figures are available for select families for all other villages. Our findings from Anur are confirmed when we look at these figures. Tables 5, 6 and 7 give figures from Orathi, Kalyanapuram and Cholavaram.

We have seen that the earnings of a peasant family do not correspond with the family size in any way, and certainly not in the sense in which Chayanov had suggested. In fact, as in Anur, the richest families in Orathi, Kalyanapuram and Cholavaram too tend to be of medium or small size.

Let us now consider the relationship between occupational holdings and family size. We must point out, at the outset, that we have used the concept of 'occupational holding' rather than 'area sown' which Chayanov uses. There are reasons for this. First, the area sown is subject to annual changes, depending upon several factors -- such as the nature of the

soil and changes in the farmer's expectation of prices, rainfall etc. Secondly, when a farmer wants to enlarge his operations, owing say to the arrival of one more child, his purpose (in the long run) would be served only if he expands his occupational holdings.

Tables 8, 9, 10, and 11 give the distribution of select households according to occupational holding and family size at Anur, Ranganathapuram, Orathi and Kalyanapuram.

The evidence from Anur suggests the following findings:

(a) There is no indication that larger families go in for larger occupational holdings.

(b) In fact, we find that the families diminish towards small and medium size as the occupational holding gets larger and larger.

These conclusions are supported at least in part by evidence from other villages. In Ranganathapuram, we find that the largest land holders fall under the 4-6 and 7-9 family size groups; whereas the largest family falls under the 20-100 size (it may be also stated that its actual holding was 36.26 acres). Likewise, in Orathi we find that the largest families hold under 15 acres, whereas the family owning over 15 acres belongs to a relatively small family size. In Kalyanapuram, the largest family size is equally represented in the largest and the smallest land holding classes. At the same time, between the largest and the second largest land holders the difference in family size is significant.

Thus, as in the case of Anur we find that there is little correlation between family size and land holding in Ranganathapuram, Orathi and Kalyanapuram.

Let us now consider the relationship between consumption expenditure and family size.

Tables 12, 13, and 14 give the distribution of select households according to consumption expenditure and family size -- at Anur, Periyathachur and Cholavaram.

From Table 12 it is evident that there is not much correlation between consumption expenditure and family size, except around or below subsistence level. The author found that the subsistence level income at Anur was around Rs 400 per capita (per annum) at prices prevailing in the village during February-May 1976.

Once this level of per capita consumption is reached any increase in the family size leads to proportionate increase in the levels of consumption. However, most families spending over Rs 5,000 per annum are either small or medium sized.

Results from other village studies substantiate the above conclusion. Cholavaram does not reveal any correlation between the two variables. On the other hand, Periyathachur appears to support Chayanov's view that consumption expenditure is related to family size. However, even here, but for the fact that the two families with the highest consumption expenditure are of biggest family size, there is no other association. There is, in fact, no progressive increase in consumption expenditure with family size -- as we saw in Table 2.

Let us now consider the relationship between C/W ratio and family consumption expenditure, in order to understand this point better. Unfortunately, we do not have C/W figures for villages other than Anur. Table 15 gives these figures for Anur. As Chayanov is not clear about the criteria of weightage in deriving his C/W ratio, we have used the simple expedient of considering children upto 10 years as 0.25 workers and the age group 10-18 as 0.50 workers. We find little correlation between the C/W ratio and the consumption expenditure at Anur. In fact, a majority of the families possess very low C/W ratio and the number in the households decline as the C/W ratio increases. This means that, irrespective of the range of consumption expenditure from Rs 1,000 to over Rs 5,000 per annum, the size of the majority of the families remains small. In other words, the higher consumption expenditure results from factors other than family size.

We have so far considered data from some villages in Tamilnadu, regarding family size, consumption expenditure, income and occupational holdings. We find that none of the villages gives evidence of the basic hypothesis and assumption of Chayanov. Our findings may be summarised as follows:

(i) In none of the villages do we find any correlation between the consumption expenditure of households and their family size.

(ii) In none of the villages do we find any correlation between the oc-



occupational holdings and family sizes of households; and

(iii) In none of the villages do we find any correlation between the level of income and family sizes of households. It is as an exception that we find families with earnings below subsistence level who tend to register some degree of correlation between family size, on the one hand, and income and consumption expenditure, on the other hand. This, however, is exceptional — as these families are constrained by objective conditions to perform below their 'normal' abilities. In other words, families which function under scarcity of capital, equipment, and even jobs, cannot be equated with the normal Chayanovese 'family labour farm' which by assumption (*ceteris paribus*) has access to all these.

As for Chayanov's assumption that per capita consumption needs are socio-culturally given at generally stationary levels, we find that there is considerable dynamics even in these. This has been the central contention of social anthropologists such as M N Srinivas<sup>40</sup> who have argued that, over a period of time, diet, ritual habits and even day-to-day needs undergo changes under the impetus of 'sanskritisation'. The present author himself found that dietary habits had undergone a complete transformation in the last 25 years at Anur. While the bulk of the families of the Yadava, Pandaram and Harijan castes consumed gruel made out of ragi in the previous generation, they have now switched completely to the consumption of rice. This appears to be a case of socio-culturally influenced Giffen's paradox. For, rice has been (and still is) more expensive, but the switch from ragi to rice is connected with aspirations for upward social mobility. Thus, ragi has become an 'inferior food', although it was both a traditional staple as well as a cheaper source of nutrition. Further, a bulk of the harijans at Anur reported they observe 'Amavasya', 'Kiruthikai', and other ritual occasions, which were not observed by them some 25 years ago. This too has implications, in that it reinforces socio-cultural influences on consumption expenditure.

#### IV

##### Relevance of Populism

It is thus clear that Chayanov's formulations have little foundation in so far

TABLE 17 : DURABLE USE CONSUMERS' GOODS IN SELECT HOUSEHOLDS ACCORDING TO CLASS — VARADAGAREDDYPATTI VILLAGE

Item	Big Land-owners	Medium Land-owners	Small Land-owners	Tenant	Labourer	Non-cultivating Owners
Utensils	5	36	75	1	154	65
Lamps	5	36	75	1	154	65
Torch lights	3	18	21	—	26	18
Cart	5	17	7	—	1	—
Watches	1	2	—	—	—	—
Bicycles	—	—	—	—	—	—

TABLE 18 : RICE AND RAGI CONSUMPTION PER ADULT AMONG DIFFERENT INCOME GROUPS — DUSI VILLAGE

Income Level (Rs)	Rice (Madras measures) <sup>43</sup>	Ragi (Madras measures)
0-250	77.12	31.19
250-499	58.62	24.09
500-749	55.56	19.05
750-999	56.11	17.22
1000-1499	55.18	14.20
1500-1999	55.29	7.56
2000-2999	63.76	5.69
3000-4999	65.33	—
5000-9999	96.96	—
10000- 00	120.00	—

as our data from Tamil Nadu is concerned.

The question now arises whether our data points in any other direction. We have already seen that Chayanov's formulations arose as a direct attack on Marxist formulations, particularly those of Lenin.<sup>41</sup> In what follows we shall briefly examine whether our data throws any light on Lenin's formulations.

According to Lenin, the consumption levels, income levels, and occupational holdings among the peasantry are mere reflections of the larger processes in the economy as a whole.<sup>42</sup> More specifically, the level of income, consumption, and occupational holdings of a peasant depends upon his position in the agrarian hierarchy.

We find that our data substantiates this point made by Lenin.

Table 16 clearly indicates that the consumption expenditure, income, and occupational holdings depend directly on the position of the peasant household in Anur village hierarchy. All other villages under consideration reveal identical results.

Table 17 indicates the number of households owning various durable use consumer goods at Varadagareddypatti. We find that there is a difference in the structure of asset holdings between big, medium peasants, on the one hand, and tenants and labourers on the other.

From Table 18 it is evident that the kind of cereal consumed is directly related to the income level. Thus, as a peasant family moves up the income hierarchy, its diet pattern and hence its consumption level (per adult) undergoes a change.

We have so far seen that there is much evidence to substantiate the basic contentions of Lenin rather than those of Chayanov.

Chayanov's contentions about a demographically-influenced peasant economy appear to be less valid than Lenin's contention that it is social differentiation that determines consumption, income, and operational holding.

However, the purpose of the present work was not to examine Lenin's contention itself in detail. It is hoped that the author would be able to do so at a later date. For the present, a limited aspect of populist theoretical formulations have been examined and found empirically unsubstantiated.

Following from this, the question arise whether the other aspects of populist formulations hold any validity. In particular,

(i) Is the peasant economy a distinct economic formation?

(ii) Is it possible for a number of economic formations to co-exist at any point of time?

(iii) Does the future of the third world lie in the proliferation and pro-



gress of the small and medium peasants?

(iv) Most important of all, is the small or medium peasant merely a 'potential' large peasant or is he 'guaranteed' to remain small or medium? In other words, if a small peasant can become a medium peasant what stops him becoming a large peasant?

These are some of the issues that arise from the present critique of populist formulations. While the author hopes to explore these questions in the context of Tamilnadu, their answers can be conclusively found only through hundreds of intensive micro-level studies in different parts of the country.<sup>44</sup>

### Notes

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1 As the purpose of the present work is only to highlight certain aspects of populism relevant to policy formation, the author has limited himself to the barest essentials in his description of populism. It is, however, hoped that the author would be able to go into more details subsequently. Most of the information on populism in the present work is based on:

(a) D Mitrany, "Marx Against the Peasants", George Weidenfeld and Nicholson, London 1951; and

(b) A Walicki, "Controversy over Capitalism", Clarendon Press, Oxford 1959.

2 The key efforts in this line are being undertaken by the Institute of Peasant Studies, Paris. The major advocates of this view have been the late D Thorner, T Shanin, B Kerblay, B Galeski, Wolfe Ladejinski, and others. The major reference material is to be found in the successive issues of *Journal of Peasant Studies* which is being brought out by some members of the above group of neo-Nardoniaks.

3 T Shanin, 'Nature and Logic of Peasant Economy' in *Journal of Peasant Studies*, Volume 1, No 2, January 1974, P 202. Similar claims have been made by others. See, Wolf Ladejinsky, *Foreign Affairs*, June 1974.

4 T Shanin. *ibid.*

5 The best analysis of the Russian Narodnik opinions are to be found in Lenin's own words. See particularly notes to chapter 1 of Lenin's "Development of Capitalism in Russia", Collected Works, Volume 3, Progress Publishers, Moscow.

6 A V Chayanov's main works have recently been translated and published by the American Economic Association, under the title "The Theory of Peasant Economy". This volume has been edited by D Thorner, B Kerblay, and R E F Smith. (1967).

7 See Chayanov *op cit*. In particular, Chapter VII entitled 'The Family Farm as a Component of the National Economy and its Possible Forms of Development'.

8 See, for instance, Shanin (*op cit*) where some of Chayanov's basic conceptual categories, such as 'self-exploitation', are found copiously scattered. In addition, Shanin echoes Chayanov's own words when he writes that the populist agrarian programme means "betting on the masses", p 202, *Journal of Peasant Studies*, Volume 1, No 2, January 1974.

9 See Chayanov (*op cit*), Part I: "On the Theory of Non-Capitalist Economic Systems".

10 D Thorner, "Peasant Economy as a Category in Economic History" in Shanin editor, "Peasants and Peasant Societies", (p 202), Pengum.

11 *Ibid.*

12 Mikhailovsky, "Sochineniya N K Mikhailovskago", Volume 1, p 430, quoted in James H Billington in "Mikhailovsky and Russian Populism", Oxford University Press, 1958, p 70.

13 V I Lenin, "The Development of Capitalism in Russia" p 600.

14 Mikhailovsky, (*op cit*) p 968, in J H B Billington. *op cit*, p 91.

15 V S Prugavin. Quoted by J H Billington, *op cit*, p 94.

16 V I Lenin, *op cit*, p 600.

17 V I Lenin, Selected Works, Volume 1, pp 208-209.

18 A V Chayanov, *op cit*, Introduction.

19 See Shanin, "Nature and Logic of Peasant Economy" *op cit*.

20 See A V Chayanov *op cit* I: "On the Theory of Non-Capitalist Economic Systems".

21 See A V Chayanov. *Ibid.* Part II "Peasant Farm Organisation".

22 This does not absolve Chayanov of other difficulties faced by such a neo-classical approach. We shall however, not for the present, go into this valid but lengthy question.

23 A V Chayanov, *op cit* p 62.

24 Guberniya — Russian equivalent of a province.

25 Desyatina — approximately 2.70 acres.

26 A V Chayanov, *op cit*, p 79.

27 *Ibid.*, p 78.

28 Uezd — Russian equivalent of a county.

29 Village Survey Report, Rangana-thapuram, Agro-Economic Research Centre, University of Madras, 1958.

30 Village Survey Report, — Orathi village. Agro-Economic Research Centre, University of Madras, 1956.

31 Village Survey Report, Dusi Village, Agro-Economic Research Centre, University of Madras, 1962.

32 Village Survey Report, Palur Village, Agro-Economic Research Centre, University of Madras, 1955.

33 Village Survey Report, Pariyathachur village, Agro-Economic Research Centre, University of Madras. (Year not mentioned).

34 Village Survey Report, Rajagambhiram village, Agro-Economic Research Centre, University of Madras, 1959.

35 Village Survey Report, Sengipatti village, Agro-Economic Research Centre, University of Madras. (Date not mentioned.)

36 Village Survey Report, Kalyanapuram village, Agro-Economic Research Centre, University of Madras, 1961-62.

37 Village Survey Report, Chollavararam village, Agro-Economic Research Centre, University of Madras, 1957-58.

38 Village Survey Report, Varadha-gareddipatti village, Agro-Economic Research Centre, University of Madras, 1952-53.

39 Village Survey Report, Keeranatham village, Agro-Economic Research Centre, University of Madras, 1962-63.

40 M N Srinivas, "Social Change in Modern India", University of California Press, Berkley and Los Angeles, 1966, pp 1-45.

41 V I Lenin, "The Development of Capitalism in Russia", *op cit*.

42 In fact, Lenin has described these processes as the development of capitalism. We do not wish to go into the semantics of the issue in the Indian context. Much has been written by Utsa Patnaik, Ashok Rudra, Amit Bhaduri, and others, regarding capitalism, feudalism and semi-feudalisms in India. We do not, at this stage, possess enough data to discuss the nature of India's agrarian economy and hence we limit ourselves to Lenin's arguments on stratification.

43 One Madras measure is the equivalent of 1.60 kg.

44 It must be pointed out that both Lenin and Chayanov had at their disposal the incredibly extensive data collected for several decades by the Zemstvo (Local government) organisations. We in India, on the other hand, do not possess detailed micro-level data even for one district. In particular, the identification and analysis of different classes of peasantry cannot be undertaken without micro-level data for large areas.



# Population and Development

Jaganath Pathy

*In the past 20 years or so, rapid growth of population in the third world countries has become a matter of increasing concern for social scientists at home and abroad. Most, if not all, of them consider the present trend in population increase to be a dreadful menace to the future development of the third world. They argue that the rapidly rising population eats up the few fruits of development, and consequently minimises the saving and investment potential of the already 'overpopulated' third world.*

*The aim of this paper, is to consider the relevance of some of the major propositions concerning the relationship between population and development in the third world. Towards this end, the author outlines in brief the main demographic theories and points out some of the crucial flaws in the basic premise of the neo-Malthusian theory.*

IN the past 20 years or so, rapid growth of population in the third world countries has become a matter of increasing concern for social scientists — at home and abroad. Most, if not all, of them have considered the present unprecedented trend in population increase to be a dreadful menace to the future development of the third world. They argue that the rapidly rising population eats up the little available fruits of development, and consequently minimises the saving and investment potential of the already 'overpopulated' third world; that, in due course, this may lead to stagnancy or even degeneration of the economy and of society.

Apparently, this neo-Malthusian scare has forced more than 30 governments of the third world to take firm steps to reduce the birth rates in their respective countries. Significantly, far more than the concerned nations, the American government and its multinational foundations have since the beginning of the 1950s shown a keen and consistent interest in the programme; and they have been spending millions of dollars, accounting for more than half the total expenditure used for the birth control programmes in the third world. Indeed, for the same purpose, 1974 was designated by the United Nations the 'World Population Year'. Obviously, this is grand testimony to the intensity of the population problem.

Even so, we are nowhere near a clearly defined theoretical perspective for understanding the impact of population on development. The nineteenth century controversies, centring around Malthus and Marx, are still the starting points of thinking on population and development. The Malthusian view, that the overpopulation is the main cause for the poverty of the masses and underdevelopment of the societies, is more or less uncritically adhered to by the ardent advocates of population control. They refuse to penetrate the deeper issues concerning the mutually contradictory elements in

production relations; and they totally ignore the facts of colonial and neo-colonial exploitation. As a result, very often, the bogey of rising population is used to obfuscate the contradictions in society, to create an ideological hegemony justifying the prevailing moribund institutions and the dominant social classes.

## FLAWS OF NEO-MALTHUSIAN THEORY

The aim of this paper, is to consider the relevance of the major propositions concerning the relation between the population and development in the third world. Towards this end, we shall outline in brief the main demographic theories: No attempt is made here to present this in a comprehensive way, as that would be beyond our competence. Our analysis will, thus, confine itself to pointing out some of the crucial flaws in the basic premise of the neo-Malthusian theory, which appear to us to be relevant to a discussion of the relation between population growth and socio-economic progress, especially in the third world.

Let us begin with the popular Malthusian theory on population. Malthus, in his well known "Essay on the Principle of Population" (1978)<sup>1</sup> pointed out the disparity between the growth of the population and the means of subsistence. He observed that, unless otherwise checked, it is the natural tendency of population to increase geometrically by

doubling almost every 25 years, whereas food production can at best increase arithmetically at a small constant rate over that produced initially. The discrepancy thus arising, between the means of livelihood and the size of the population, is regulated by means of wars, epidemics, famines, limitation of marriages, birth control, abortion, and other methods of checking the population growth. As a clergyman, he was critical of abortion and the like, and suggested 'moral restraint' and prolonged celibacy coupled with chastity.<sup>2</sup>

Malthus did not substantiate his argument, that the means of subsistence cannot grow as rapidly as the population, or that the latter has the tendency to outstrip the former. He considered mainly the limitation of land supply, and thought that this limitation is eternal and immutable. He failed to foresee the development of technology, extension of cultivable area, international trade, and potential of changing social organisations. In fact, he denied the human potential, and insisted that human intervention is powerless to withstand the inevitability of the nature. Thus, for him, the population problem is essentially one of balance between people and resources (mainly land). And, since population grows rapidly over the limited resources, poverty and underdevelopment would inevitably increase, corresponding to the demographic expansion. In this way,

TABLE 1: AREA AND POPULATION OF DIFFERENT REGIONS OF THE WORLD (Mid-1971)

Regions	Area (sq kms)	Population (millions)	Number of States and Territories
Europe	10,500,000	650	37
Asia	44,400,000	2160	42
Africa	30,300,000	353	56
America	42,100,000	522	47
Australia and Oceania	8,500,000	20	24
Total	135,800,000	3705	206

Source: K. Spidchenko, "Economic Geography of the World", Moscow: Progress Publishers, 1972, p 18.



TABLE 2 : NUMBER OF PEOPLE IN  
RELATION TO TILLED ACREAGE  
(1958-59)

Country	No of People Per Acre of Tilled Land
Japan	7.4
Netherlands	4.4
Egypt	3.9
UK	2.9
China	2.5
Peru	2.4
Indonesia	2.0
Norway	1.7
Brazil	1.4
Italy	1.2
India	1.1
WORLD	0.80
Mexico	0.70
Nigeria	0.60
US and USSR	0.38
Argentina	0.28
Australia and Canada	0.17

Source : G. Borgstrom, "The Hungry Planet", New York : The Macmillan Co, 1965, p 5.

he not only rationalised the existence of the poverty of the masses, but also urged that some (the poor) must perish when population presses beyond subsistence.

Needless to elaborate the character of the Malthusian theory of population. It is a pessimistic, deterministic, theory which attempts to rationalise capitalist and imperialist exploitation. Naturally, it is the most influential theory about population. Several classical and neo-classical economists have admired the theory, with only some minor qualifications. And, as we will soon see, since the time of Malthus, the literature on population has been filled with pessimistic prognostications of the impending shortage of natural resources and food-stuffs. For the time being, let us brief Marx's theory on population which

stands quite opposite to Malthus's.

In direct contradiction to the Malthusian 'natural' theory, Marx and Engels insisted that it is impossible to speak of any generally applicable law of population, which is the same for all times and all places.<sup>3</sup> They argued that population processes are related to the social organisation. Its growth depends on diverse factors — such as the level of productive forces, the relations of production, the state and the laws about morality, political and other ideas, religion, and also the geographical environment. Of course, ultimately, the relations of production determine the population. Accordingly, each socio-economic formation has its own, historically transient, law of population.

With regard to overpopulation, Marx observed that it is purely relative to a particular set of institutional arrangements in a society, at a particular historical time and space. For instance, in a capitalist society, there is capital accumulation which forces migration of workers, and creates relative overpopulation manifested in unemployment. That is to say, overpopulation is built into the very system of capitalism. So a low rate of population growth is no remedy, it is the mode of production that must be changed. He made a distinction between the 'means of subsistence' and the 'means of employment', and observed that poverty is due to the pressure on the means of employment and not on the means of subsistence. By this, he implied that social relations present a formidable obstacle to the productive use of human resources, and thus create an artificial scarcity of the means of subsistence. This is topical; but after Marx there is hardly any com-

prehensive attempt to develop the same argument. Moreover, it is only very recently that a few Marxist scholars have taken up the study of population growth. Primarily for that reason, meagre work has been done on population from a Marxist standpoint.

In the absence of decisive works by Marxists, the Malthusians, being encouraged by the imperialist powers, have undertaken various sophisticated researches on population. In changing circumstances, they have modified the original theory, and it is now known as the neo-Malthusian theory. According to this theory, the present unprecedented rate of population growth increasingly presses on limited natural resources, and results in diminishing returns. Therefore, to achieve a given rate of economic growth, an ever-increasing rate of investment becomes necessary. However, since high growth of population means more young dependants on those who are engaged in production, there remain very little savings, which consequently limit the possibility of meeting the demand for higher investment. Thus, ultimately, economic growth and social development are obstructed by the rapid rise of population. And, unless this trend is deliberately checked, it contains inevitable danger to human society.

Accordingly, neo-Malthusians argue that population must be proportioned to resources so as to achieve the best economic effect. Here comes the concept of 'optimum population'. This refers to the number of people who, in balance with the available resources and the existing level of technology, would produce the highest level of living. Based on this concept, are popular terms such as 'overpopulation' and 'under-

TABLE 3 : SHARE OF DIFFERENT REGIONS IN TOTAL WORLD POPULATION (1650-1957)

Year	World Total		Africa		Northern America		Latin America		Asia (Excluding USSR)		Europe and USSR		Oceania	
	No	Per Cent	No	Per Cent	No	Per Cent	No	Per Cent	No	Per Cent	No	Per Cent	No	Per Cent
1650	545	100.0	100	18.3	1	0.2	12	2.2	327	60.0	103	18.9	2	0.4
1750	728	100.0	95	13.0	1	0.1	11	1.5	475	65.2	144	19.8	2	0.3
1800	906	100.0	90	9.9	6	0.7	19	2.1	597	66.9	192	21.2	2	0.2
1850	1171	100.0	95	8.1	26	2.2	33	2.8	741	63.3	274	23.4	2	0.2
1900	1608	100.0	120	7.5	81	5.0	63	3.9	915	56.9	423	26.3	6	0.4
1920	1810	100.0	140	7.7	117	6.5	91	5.0	967	53.4	486	26.9	9	0.5
1930	2013	100.0	155	7.7	135	6.7	109	5.3	1073	53.5	531	26.3	10	0.5
1940	2246	100.0	172	7.7	146	6.5	131	5.8	1213	54.0	572	25.5	11	0.5
1950	2495	100.0	199	8.0	168	6.7	162	6.5	1379	55.3	574	23.0	13	0.5
1957	2795	100.0	225	8.0	189	6.8	192	6.9	1556	55.7	618	22.1	15	0.5

Source : 1650-1850 estimates from "Determinants and Consequences of Population Trends", United Nations, 1953, Table 2, p 11. The figures represent United Nations adjustments of A M Carr-Saunders' estimates. See his, "World Population: Past Growth and Present Trends" London, 1936, p 42. 1900-1950 estimates from United Nations, "Demographic Year Book, 1957", Table 2, p 123; those for 1957 are from "Demographic Year Book, 1958", p 104.



TABLE 4 : ANNUAL RATE OF GROWTH OF POPULATION AND PER CAPITA INCOME IN SOME UNDERDEVELOPED COUNTRIES

Location	Annual Rate of Growth	
	Population in 1969	Per Capita Income 1957-59 to 1964-66
Morocco	3.0	0.2
Mozambique	1.2	2.9
Nigeria	2.5	3.2
Uganda	2.5	1.2
Sudan	3.0	1.7
Dominican Republic	3.4	-0.6
El Salvador	3.3	2.5
Panama	3.2	4.2
Bolivia	2.4	2.8
Brazil	2.8	1.9
Chile	2.3	2.3
Colombia	3.4	1.4
Peru	3.1	3.5
Iran	3.1	3.7
Iraq	2.5	4.2
Burma	2.2	1.5
India	2.5	1.7
Pakistan	3.3	2.8
S Korea	2.8	3.2
Malaysia	3.1	2.8
Philippines	3.5	0.9
Thailand	3.1	4.2

Source : Column 1 from "1969 World Population Data Sheet", Population Reference Bureau, Washington DC; Column 2 from "National Accounts of Less-Developed Countries" Development Centre, OECD, Paris, July, 1968.

population'. What is more, all these terms are used in a way that suggests they are self-explanatory and have some absolute significance. The fact that these are absolutely relative to a specific time, space, and purpose, is often ignored.

With the help of selective statistical data, neo-Malthusians attempt to demonstrate the adverse effects of population growth on investment, output, and capital-output ratio.<sup>4</sup> Their primary focus is explanation of the poverty and the underdevelopment of third world countries which together threaten the basis of the existing political order. The explanation is done in terms of overpopulation and the follow-ups. Following from this mission, we have inherited a massive literature.

The popular proposition explaining the underdevelopment of the third world is that the population in the third world has become — or is becoming — too large in relation to the available resources, i.e. that the third world is overpopulated; and that the present

high rate of population growth is the main (perhaps the only) obstacle to the socio-economic development of third world countries.

Several questions emerge from the above proposition. Are the countries in the third world overpopulated? Are the resources estimated so as to bring a correlation between the size of the population and the available resources? Are the known resources handled solely for the betterment of the third world masses? Is it not possible to effect social development by discovery of new resources, better exploitation of existing resources, technological invention, and changes in social system? Do we not also have evidence that, in a higher density of population the standard of living is higher than what it used to be in a lower density of population? Is there any guarantee that a low rate of growth of population would increase investment capacity? And finally, without changing the social organisation, would the decrease in the population growth alone help socio-economic progress in the third world? Let us try to answer these and other questions in the following.

Contrary to the belief that the third world is overpopulated (or becoming overpopulated), there are several very sparsely populated countries in Africa, Latin America, and also in some parts of Asia, which — even if their present rate of growth of population is above two per cent — will not reach the density of the capitalist world for a long time. For example, Africa is almost three times as large as Europe, yet its population is approximately 50 per cent smaller than that of Europe (Table 1). However, prior to the advent of colonialism in Africa and the growth of slave trade — through which about 100 million Africans were turned into slaves — the population of Africa was even bigger than that of Europe.

Admittedly, the rate of growth of population is slow in the capitalistic countries but many of them are already densely populated. In this context, a comparison between some of the highly populated countries of Europe and Asia — representing the first and the third world respectively — may reveal the point further. The density per sq km in 1972 for England and Wales was 324, for Netherlands 319, for Belgium 317, for Japan 280, for the Federal Republic of Germany 240, and for Italy 178; on the other hand, for Bangladesh it was 425, for India it

was 164, for the Philippines 123, for Indonesia 81, and for Pakistan 67.<sup>5</sup> Thus, excluding Bangladesh, all the other mentioned third world countries are 'less populated' than the capitalist countries. In fact, it is not the third world but the first world which is overpopulated.

Now let us also consider the density of population over useable land. For, one may argue that having more space need not mean that the total space is habitable or useful for cultivation. But we also know that not more than 10 per cent of the total land in the third world is under cultivation and that considerable reserves of arable land remain unused. Anyway, even if we take up the density on tilled acreage, the third world countries do not compare badly with Japan, Netherlands, and even UK (Table 2). There are several third world countries which have less numbers of people than the world average counts. Another estimate is that, in Japan there are nine persons per cultivated acre, in Britain five, while in India there are two.<sup>6</sup> We should also remember that we have much more cultivable land, remaining waste, compared with the Western world.

Besides land, there is the question of mineral and other resources. Whether the third world has inadequate resources to meet its size of population, is thus the next pertinent question. The problem of resource is a relative one. Resources are never fixed, except for the short run; over time, they expand with social development and development of knowledge. Resource exploitation is also a social phenomenon. It is the social structures which determine the importance of the different resources, allocate them, and distribute them.

Everywhere in the third world, there

TABLE 5 : AGRICULTURAL AND INDUSTRIAL GROWTH IN 1960-67

Region	Average Annual Increase	
	Agriculture	Industry
Capitalist World	3.0	6.0
Socialist World	3.5	8.5
Third World	2.1	6.5
Whole World	2.7	6.5

Source : "World Economic Survey, 1968", United Nations.



are considerable reserves of underground minerals, out of which only a small part have so far been explored. There are also petroleum-rich countries, too, such as Iraq, Iran, Libya, Saudi Arabia, and Kuwait. In addition, there are hundreds of rivers which have never been used for irrigation or for generation of power. Generally speaking, underdeveloped nations are not poor in resources. Nature has distributed its bounties unevenly, and that is to the advantage of the third world. The major problem is of the social relations of production — impending the exploitation of the resources and the distribution of profit. The fact is that natural-patriarchal, feudal and semi-feudal, and petty-commodity production hold back labour productivity. And, taking advantage of the situation, the colonial and imperial powers have drained out — and continue to — drain out the resources through several means — and hence perpetuate the underdevelopment of the third world.

To recapitulate the foregoing. The third world is not overpopulated, rather many of its countries can safely accommodate a larger population than at present.<sup>7</sup> As for resources, their little-explored underground wealth is in no way less than that of the other worlds. But it is because of colonialism and imperialism, on the one hand and internal production relations, on the other, that the potentiality for capital investment and economic growth is restricted today. In short, the third world is underdeveloped, not because of the size of its populations or because of less resources, but because of the existing relations of production. No doubt, some cities of the third world — such as Jakarta, Calcutta, Sao Paulo, Port Harcourt, etc — have relatively higher populations, manifested in unemployment, slums, etc. But even this is largely because of the type of economic system which has forced extensive rural migration to the towns.

Further, in the light of the diversity of demography, resources, political economy, and socio-cultural organisations among the third world countries, the general neo-Malthusian explanation for underdevelopment as being due to overpopulation, cannot stand. The term 'overpopulation' seems popular because, with it, all vital problems like poverty, unemployment, and many other such phenomena, can be so glibly explained. Thereby, attention can be diverted from the real causes of back-

TABLE 6 : GROWTH OF GROSS DOMESTIC PRODUCT, 1950-67  
(1950=100)

Year	Ceylon	Chile	Egypt	India	Taiwan	Pakistan
1950	100.0	100.0	100.0	100.0	100.0	100.0
1955	121.4	116.4	123.7	118.1	150.8	109.7
1960	142.6	140.8	170.0	144.0	209.2	130.6
1965	164.1	179.9	223.5	167.5	339.7	172.2
1968	189.2	261.0	—	197.1	450.3	205.7

Source : Excerpted from A Maddison, "Economic Progress and Policy in Developing Countries", Unwin U P, 1970, Appendix B.

wardness. In this way the troubled States of the third world can be saved, where the multinationals have invested millions of dollars and are earning enormous profits every year.

The advocates of population control argue that the high rate of population growth in the third world limits the capacity for savings and investment. In other words, the rapid rise in population is the chief obstacle to the socio-economic development of the third world. But history has something else to say. Increased population growth had been, in fact, one of the prime causes of the rapid economic progress of Europe and North America, over the last 200 years. Whitehead observed that in Western Europe, "a persistently increasing population has been accompanied by an equally persistent rise in the general standard of life".<sup>8</sup> Some authors also hold the same argument for China and India.<sup>9</sup> These Asian countries have the culture and civilisation going back over 2,000 years. At that time too their most fertile lands were highly populated. Rightly, Boserup has argued that population pressure has been historically a favourable element in the intensification of agriculture — a condition for increased productivity.<sup>10</sup> Similarly both Marxist and non-Marxist scholars have argued that people are needed to consume products, so that a small consuming population is actually an impediment to the functioning of the capitalist system.<sup>11</sup>

In any case, the high rate of population growth in the third world has been concluded from a short period of time. Any analysis over a long period (1650-1957) will reveal that their share in world population is lower by almost 10 per cent (Table 3). Besides, between 1650-1957, the population in Africa grew only 2½ times and in Asia (excluding USSR) 4½ times. On the

other hand, in Northern America it was 189 times higher, and in Europe (including USSR) 6 times higher. Obviously, the growth of population in the third world has been smaller compared with that in the developed world. As for birth rate, it is only recently that a few of the third world countries have had a birth rate of over 3 per cent; whereas, as early as in 1880 England had a birth rate of 3.4 per cent, and the same trend was noticed in Germany as late as in 1904. In 1931, the Japanese birth rate was more than 3.2.<sup>12</sup> Clearly, then, actual growth of population in the third world is less than that of Europe. And there is no historical evidence that a high density of population was the force inhibiting development.

There is also no evidence that a smaller population would bring prosperity. We may rather notice cases supporting the reverse. Several countries in Africa and Latin America are underpopulated, but they are also underdeveloped. In contrast, densely populated countries like Netherlands, Japan, West Germany, Great Britain, Belgium, Italy, Israel, and Czechoslovakia, are highly developed.<sup>13</sup>

Let us take a concrete case of the impact of depopulation. In the 16th century,<sup>14</sup> the rich Congo kingdom had a population of about two million. During the colonial period, due to slave trade, emigrant labour, and compulsory military service, Congo's population was reduced to almost a third. Even now, it is yet to reach the 16th century figure. With depopulation, the once prosperous kingdom was ruined and became one of the most backward countries in the world. Its people suffered from chronic food shortage and frequent famines. One may cite several such instances.<sup>15</sup> The arguments about the relation between population growth and underdevelopment are, therefore,



TABLE 7 : FUNCTIONAL DISTRIBUTION OF FOREIGN ASSISTANCE FOR FAMILY PLANNING PROGRAMMES

Functional Activity	Percentage of Each Activity Financed by Foreign Assistance				
	India 1968-69	Jamaica 1969-70	Korea 1968	Malaysia 1969	Pakistan 1968-69
Training	68	77	99	47	94
Information and education	38	35	75		83
Contraceptive supplies	40	60	21	94	75
Research and evaluation	28	85	89	52	78
Operational activity	34	29	38	0.7	62

Source : "Questionnaire on National Family Planning Programmes", OECD Development Centre, 1969.

very simplistic, and the third world intellectuals have alas accepted them uncritically.

By stressing the adverse impact of a high rate of population growth, the present-day demographers have created undue panic about shortages of foodstuffs in the world — although, over the last 30 years, food production has increased by 50 per cent while world population has gone up by only 35 per cent.<sup>16</sup> This means that there has been an overall increase of 15 per cent in food production.

There is neither causal nor concomitant connection between population growth and per capita income. There are several third world countries — like Nigeria, Panama, Bolivia, Peru, Iraq, Iran, S Korea and Thailand — who have high rate of annual population growth accompanied by a high rate of growth in per capita income (Table 4). Moreover the third world, as a whole, has a higher rate of annual industrial growth than the capitalist world (Table 5). There are some countries in the third world, which have a very high rate of increase in GNP.<sup>17</sup> Many countries have far higher growth rate of Gross Domestic Product than their population growth rate. Between 1950-65, Ceylon's GDP increased by 64 per cent, Chile's by 80 per cent, Egypt's by 113 per cent, India's by 67 per cent, Taiwan's by 240 per cent, Pakistan's by 72 per cent, etc (Table 6). Reality does not quite subscribe to the popular neo-Malthusian fear.

The ideological content of birth control becomes more clear, from the role of imperialist powers — especially US which has played a dominant role in publicising the scare of demographic expansion. All along, the major American foundations and the IPPF have generously provided more than half

the total resources which have gone into the field of family planning in the third world.<sup>18</sup> Total foreign assistance for overseas family planning in 1962 was less than \$ 7 million; by 1969, this had increased to about \$ 115 million.<sup>19</sup> These figures exclude the US assistance in local currencies generated by food aid. In 1969, the contribution to family planning in the third world from US AID was \$ 48 million, of Ford Foundation \$ 18 million, of Population Council \$ 12.5 million, of SIDA \$ 9 million, of IPPF \$ 8.4 million, of the Rockefeller Foundation \$ 4.5 million, and others a little more than \$ 10 million.<sup>20</sup> Foreign assistance for research and training in the family planning programme in the third world countries accounts for a very decisive proportion (for details see Table 7).

One asks why the US, its multinational foundations, and US-dominated world bodies such as the World Bank,<sup>21</sup> carry out a campaign for population control with such crusading zeal. Foreign aid is not charity. It is good business, and contributes to political stability in the recipient countries. The attempts are to create a new smoke-screen in the campaign of exploitation of the third world.<sup>22</sup> Somehow, the third world has accepted the ideological hegemony which covers exploitation by the multinationals and safeguards the decaying internal social institutions of the third world countries. Indeed, the so-called, experts of the third world are trailing behind the guides and mentors of Princeton, Michigan, Harvard, Berkeley, Boston, and other centres for population studies in the US, which have influenced the course of population policy. The foreign agencies have also penetrated into the third world countries, in the garb of guiding some US-bred policies such as Community

Development, Green Revolution, birth control, etc. They have thereby even managed to thwart the internal processes of social transformation. Through these ways they are also attempting to hide the wounds inflicted by colonial and neo-colonial exploitation.

The greatest obstacle to the development of the third world countries lies, in fact, in their dependence on the Western developed countries and their own oppressive socio-economic systems. Their backwardness is not the result of the high rate of population growth but of colonial<sup>23</sup> and neo-colonial exploitation, indigenous archaic modes coupled with feudal, semi-feudal<sup>24</sup> and bureaucratic capital formations. The population problem is basically part of the general socio-economic crisis, caused by the extremely unjust world economy and the internal inequities of the ossified social system. Thus, not population control, but fundamental social transformations, are the essential conditions for achieving a breakthrough in the third world's underdevelopment.

The above arguments do not, however, belittle the significance of population policies. In a planned economy and society, it is an essential requirement so far as the improvement of the conditions of life and work of the entire population is concerned. The general health of the mother and children shall be looked after. In that concern, attempts must be made to implement, certain policies for raising the marriageable age, and to propagate the importance of having gaps between child bearings and opting for planned families. But population control is not the precursor of socio-economic development as is often believed. Population control can achieve little in isolation from the structural transformations. And so, one must see the structural constraints. Some economies may need large families,<sup>25</sup> and similarly a proper consideration may have to be given to the sparsely populated regions and communities.<sup>26</sup> Moreover, before introducing any strict objectives in the population policies of the third world, it is necessary to fulfil the minimal human requirements.<sup>27</sup> Our arguments only imply that consideration of population, in isolation from imperialist domination and internal production relations, is insufficient. It side-tracks the fundamental causes of backwardness of third world countries.<sup>28</sup>

To reprise the main findings of the foregoing discussion, we may note that



there is no strong correlation between the high rate of population growth and the underdevelopment of these societies. Rather, history has provided evidences in reverse. Again, the popular belief that the third world is over populated appears untrue. The present high birth rate is not unique to the third world, Western Europe had already experienced it.

Thus the major cause of underdevelopment of the third world is not the size of population, but the colonial and neo-colonial exploitation and the pre-capitalist social formations. To cover the fact of such exploitation, imperialist agencies are trying their best to put the blame on the growth of population. This, however, does not mean that population policies are not necessary. These should mainly concern themselves with the improvement of conditions of life and work of the entire population, giving particular emphasis to the health of mothers and children. The path for the development of the third world thus lies through its structural transformations to release its own productive forces and through continuous struggles against the external exploitative and reactionary forces.

### Notes

[The author is grateful to Suguna Paul, Manu Bhaskar, T G Jacob and D R K Reddy for help. However, the views expressed are those of the author.]

- 1 T R Malthus, "Population: The First Essay" (Ann Arbor: University of Michigan Press, 1959).
- 2 In this connection, we may remember M K Gandhi, who advocated sexual abstinence in marriage to prevent unwanted children. He said, "the union [marriage] is meant, not for pleasure but for bringing forth progeny. And union is criminal when the desire for progeny is absent", *Young India* March 12, 1925. Today, this restraint is believed untenable.
- 3 The arguments of Karl Marx and Frederick Engels on population have been reproduced in R L Meek (ed), "Marx and Engels on the Population Bomb" (Berkeley, Calif: Ramparts Press, 1971).
- 4 For a discussion see, J Tinbergen, "The Design of Development" (Baltimore: Johns Hopkins Press, 1958), Chap I.
- 5 See, E Hofsten, "The Family-Planning Controversy", *Monthly Review*, vol 26, no 6 (Nov 1974) p 19. Table 1 shows that Europe is the most heavily populated part of the world. Even in 1950, the population density of Europe was 80 persons per sq km as compared with 57 persons for Asia. See Kuan-I Chen, "World Population Growth and Living Standards" (New

- York: Bookman Associates, 1960), p 47.
- 6 Refer to D Wilson, "A Quarter of Mankind" (Penguin Books, 1968), p 302.
- 7 See, E Boserup, "The Conditions for Agricultural Growth" (London: Allen and Unwin, 1965).
- 8 A N Whitehead, "Adventures of Ideas" (New York: Macmillan), p 94.
- 9 For instance, See, F L Patton, "Diminishing Returns in Agriculture" (New York: Columbia University Press, 1926), pp 17, 78.
- 10 E Boserup, 1965, *op cit*.
- 11 For example, J M Keynes said that the decline of the birth rate in 1920s was the main reason for the depression. P M Sweezy argued that in the capitalist system, a slower rate of growth of population can lead to more unemployment. See his, "Theories of Capitalist Development" (New York: 1942).
- 12 See, E F Penrose, "Population Theories and Their Application" (Westport: Greenwood Press, 1973), p 99.
- 13 See, B Berelson (ed), "Population Policy in Developed Countries" (New York: McGraw-Hill, 1974), Table 1, p 3.
- 14 S Axelson, "Culture Confrontation in the Lower Congo" (Uppsala, 1970), p 91.
- 15 In the history of mankind several dreadful famines, epidemics and wars had occurred, each taking away lives of millions of people and ravaging the economy and society. We have also cases inside third world countries of the highly developed regions being densely populated while the sparsely populated areas are less developed. (For instance, in India Jharkhand and the North Eastern Region versus the Peninsula.)
- 16 See, Idris Cox, "The Hungry Half" (London: Lawrence and Wishart, 1970), p 71.
- 17 For instance, during 1960-67, the annual percentage increase was 19.2 for Libya, 10.0 for Taiwan, 8.8 for Jordan, 7.9 for Iran, 7.6 for South Korea, 7.5 for Ivory Coast and Nicaragua and 6.9 for Iraq. See E M Martin, "Development Aid: Successes and Failures" in *OECD Observer*, No 43, (December 1969), pp 5-12; see also, G Ohlin, "Population Control and Economic Development", Development Centre, OECD, Paris, 1967.
- 18 In some countries it is even more than half. For instance in 1968 the percentage of foreign aid for family planning was 68 in Pakistan, 75 in Mauritius, etc. See "Population Programme and Economic and Social Development", Development Centre Studies, OECD 1970, p 47.
- 19 *Ibid*, p 48.
- 20 There are 11 Western countries (Belgium, Denmark, Finland, Germany, Japan, Netherlands, Norway, Sweden, Switzerland, UK and USA), some multilateral agencies (UN, WHO, UNICEF, ILO, FAO,

- UNESCO, IBRD, OAS, OECD and Colombo Plan) and private foundations and organisations (21 of USA, 4 of England, and one of Japan) which have been active in the birth control and family planning programmes of the third world.
- 21 In his initial speech as president of World Bank, R S McNamara insisted that rapid population increase is "one of the greatest barriers to the economic growth and social well-being of our member states". See his "Address to the Board of Governors, World Bank", *Population Bulletin* 24, no 3 (Nov 1968), pp 69-70.
- 22 For an instance of the intensity of imperialist exploitation we may mention a World Bank estimate which found that the net flow of private investments into the third world between 1960 and 1968 was roughly £13,000 million earning a profit of £2,000 million each year. See I Cox, 1970, *op cit*, p 46.
- 23 See, Josue de Castro, "Geography of Hunger" (London, 1952).
- 24 Even World Bank has accepted that the socio-economic system operating in the countryside is generally hindering the rural development process. "The Assault on World Poverty, Problems of Rural Development, Education and Health", A World Bank Publication, 1975, p 21.
- 25 In subsistence types of agriculture, people are convinced that more children are to their benefit. They are also necessary for looking after the parents in their old age. Moreover, in the face of high infant mortality and diseases, people opt for more children. See in this context, M Mamdani "The Myth of Population Control: Family, Caste, Class in an Indian Village" (New York: Monthly Review Press, 1972). See also L Pearson, "Partners in Development" (Pall Mall Press, 1969), pp 197-98.
- 26 For instance in India (1961) density of population varied from 155 per sq km in Assam and 189 in MP to 1,032 in West Bengal and 1,127 in Kerala. Similar disparities are also observed between districts, and with regard to the birth rate. See G Chand, "Population in Perspective" (New Delhi: Orient Longman Ltd 1972), p 127. About communities, there are several small tribal and other communities which need more population to safeguard their interests.
- 27 In this context, it may be useful to study the Chinese experience. See, Chen Pi-Chao, "China's Population Programme at the Grass-Roots Level", *Studies in Family Planning* (August 1973).
- 28 On India, D Banerji observes that the bogey of rising population came in very handy for covering up the massive failures of the government and "side-tracked the basic problems of poverty, social injustice, ill health, primary education and illiteracy, ...", "Strategy for Family Planning", *Social Scientist*, Vol 1, No 1 (August 1972), p 42.



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## Speech of the Chairman, Shri Jaykrishna Harivallabhdas

THE following is the Speech delivered by the Chairman Shri Jaykrishna Harivallabhdas at the 18th Annual General Meeting held on 20th July 1976.

Gentlemen,

I have great pleasure in welcoming you all to this Eighteenth Annual General Meeting of the Company. The Report of the Board of Directors and the Annual Accounts for the year ended 31st March 1976 are already in your hands for some time and with your permission I propose to take them as read.

### GENERAL ECONOMIC CONDITIONS

During the past twelve months we have witnessed considerable improvement in all spheres of our country's economy — thanks to the bold and well conceived directives given by your Prime Minister Mrs Indira Gandhi through her Twenty Point Programme. Much wanted peace in all sectors of the industry is now being experienced on account of effective steps taken by the Government since the declaration of emergency. Unprecedented inflationary tendencies appear to have been within reasonable control. 1976 Budget has very encouraging effect on production and industrial investments. The dynamic approach in the Government policies has placed the Country on a better platform for further achievements.

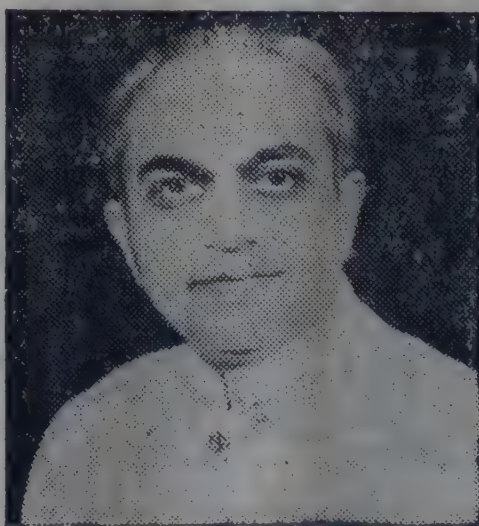
### WORKING OF THE COMPANY

For a couple of years prior to the year under review, Plant had to be kept partially idle for want of raw materials. During the year under review, supply position of raw material considerably improved in spite of very pessimistic indications given by the authorities concerned. Company could therefore achieve much higher production during the year under review as compared to earlier years. The increased production was reflected in higher sales. You must have noticed that the turnover during the year under review was 33 per cent higher as compared to the turnover during the preceding year. This gratifying increase in turnover has enabled

the Company to maintain the profits in spite of considerable increase in cost of raw materials, etc. Our Textile Yarn Plant for manufacturing Nylon and Polyester Yarn is working entirely with the indigenous supplies. I am very happy to inform you that our Polycondensation Plant is working very satisfactorily and is now well set for higher production if raw material is made available in adequate quantities.

### POWER CUT

The authorities had continuously appreciated the possibilities of considerable loss this industry would suffer on ac-



Shri Jaykrishna Harivallabhdas

count of power cut so far. However during the year under review power was made available to our Plant on restricted basis as a part of general policy for the power cut. All efforts were made for maintaining the production by installing additional generating sets. The power cut has been one of the reasons for considerable increase in cost of operation during the year under review.

### EXPORTS

You will be glad to note that we were successful in increasing the exports of Art Silk and Synthetic Fabrics. Our exports during the year under review were Rs 132.81 lacs (FOB) as against Rs 36.85 lacs (FOB) during the previous year.

### FINANCE

Considerable increase in the credit facilities to our customers and increase in cost of raw materials have increased our requirements of working capital tremendously. You will therefore notice considerable increase in our borrowings. Recessionary trend has caused considerable strain on our working during current year. We hope that Government will reduce the excise duty and soon take additional measures which would give much wanted relief by industries like ours which are facing severe recessionary trends.

### EXPANSION

The Company's plans for setting up Depolymerisation Plant and for installing Balancing Equipment with a view to broad-base its production are well under progress. Our Tyrecord Plant's requirements are met by importing caprolactum. It is therefore very essential to conserve raw material to save foreign exchange. This can be achieved by reducing the waste of caprolactum by installing De-Polymerisation Plant. This Plant which involves a capital outlay of Rs 192 lacs will enable the Company to recover Caprolactum from Nylon Yarn waste which otherwise would have been sold at a throwaway price. This Plant will therefore not only enable us to reduce the cost of caprolactum consumption but will also help us to increase our production as a result of additional availability of caprolactum which is our raw material. While your Company has to depend upon import of certain machineries for broad-basing its production, every effort is being made for encouraging indigenous manufacturers to supply machineries as far as possible.

As you are aware, we propose to set up a Conveyor Belting Plant at Roha a place in backward area of Maharashtra. The Plant will have an installed capacity for manufacturing 1200 tonnes of Conveyor Belts and 12,00,000 Nos of fan belts and V belts per year. We have placed some of the orders for im-



ported machineries required for the Plant. The plant is expected to go into production during 1978. The total capital expenditure involved in the said Project is around Rs 600 lacs. The supplies of Conveyor Belts are far short of the demand in this Country. The proposed Plant will therefore considerably improve the profitability of the Company's resources in addition to diversify its activities. The Company's plans for improving and expanding the Research and Development Centre is progressing satisfactorily. The equipments are partly ordered with indigenous suppliers.

There appears to be good prospects in chemical Industry. Government policy is also very encouraging in this field, Company is therefore actively considering proposal for diversification by undertaking new projects in Chemical Industry.

#### PUBLIC ISSUE OF EQUITY SHARES

It is gratifying to note that we received 32,571 applications for 40,70,675 shares in response to our public offer for issuing 7,90,000 Shares. I take this opportunity to express your Directors' appreciation for the able guidance given by and strenuous efforts undertaken by ICICI Ltd, for managing the tremendous task involved in this public issue. I on behalf of the Board also thank the Press, Managing Brokers M/s Harkison-dass Lukhmidass and various Financial Institutions; Share Brokers and Collecting Banks, viz, Mercantile Bank Ltd, United Bank of India, Bank of India, Central Bank, City Bank and Vijaya Bank, Issue House M/s Mas Services Pvt Ltd, and various applicants for the confidence displayed and sincere co-operation given by them for the Public Issue.

We will shortly be adding more than 25,000 shareholders when the shares

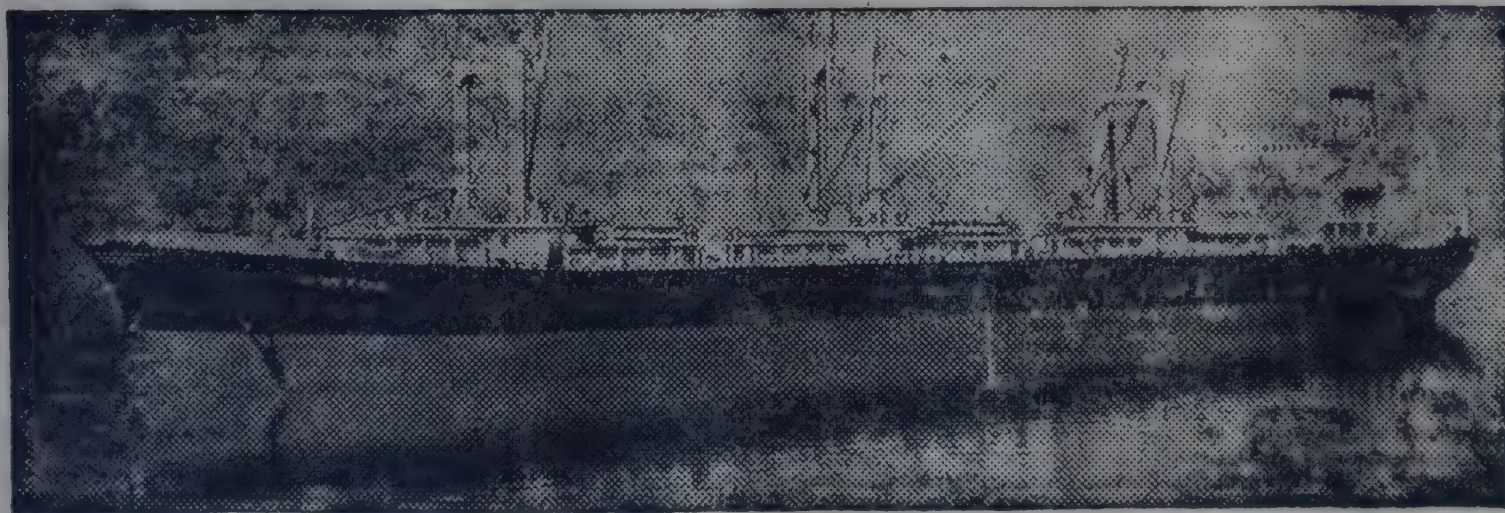
are allotted by your Directors tomorrow. These new members will be bringing with them additional resources to the extent of Rs 256 lacs and will be augmenting our reserves by Rs 177 lakhs by way of premium on issue of shares.

#### LABOUR RELATIONS

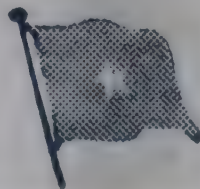
Much of the credit for attaining higher production during the year under review has to be attributed to the sincere efforts and disciplined behaviour of our employees. The Management takes special pleasure to record with gratitude the co-operation and the sincere efforts of the employees of the Company.

With these remarks I now request the Shareholders to appreciate and adopt the Board Report and the Annual Accounts.

*Note:* This does not purport to be a record of the proceedings of the Annual General Meeting.



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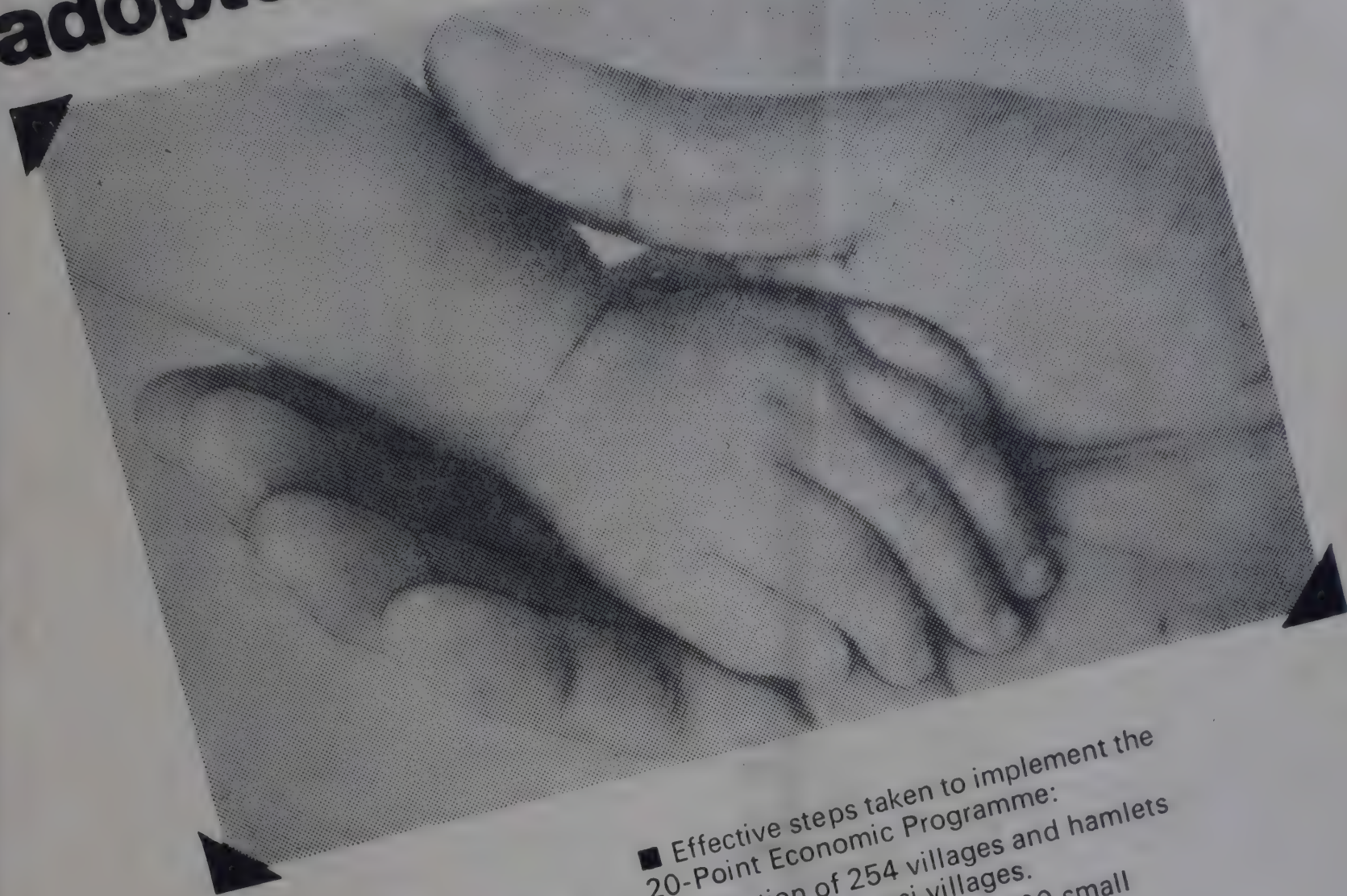
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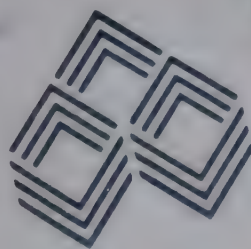


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- Customer service toned up — teller system introduced at many branches.
- Considerable foreign exchange deposits and remittances from overseas Indians.
- Over two-thirds of credit expansion absorbed by priority and public sectors.
- Resources transferred from urban to rural areas to build up rural economic potential.
- A regional rural bank established in Orissa.

- Effective steps taken to implement the 20-Point Economic Programme:
  - Adoption of 254 villages and hamlets including Adivasi villages.
  - Credit extended to 250,000 small borrowers.
  - Special effort made to assist development of handloom sector.
  - Substantial aid on soft terms to small and marginal farmers and resettled landless and bonded labourers.
  - Active measures to develop minor irrigation facilities.

As we enter the eighth year of nationalisation, we re-dedicate ourselves to the task of working for our national goals and implementing the Prime Minister's twenty-point programme effectively so that the weaker sections of our society may grow stronger.



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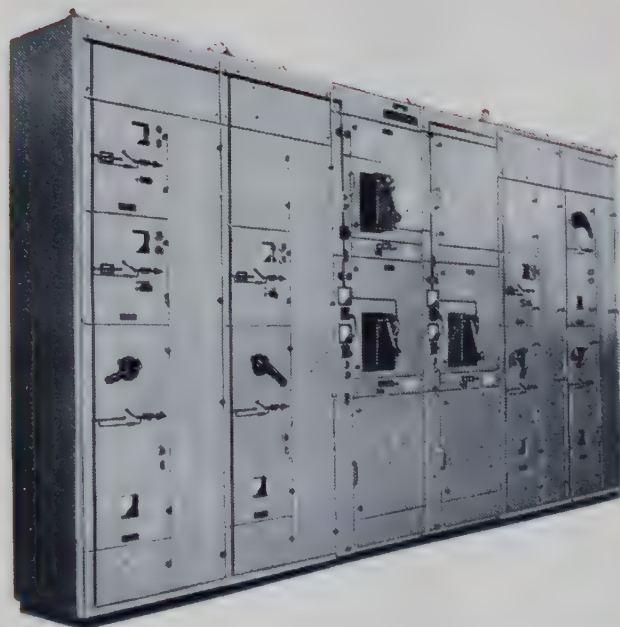
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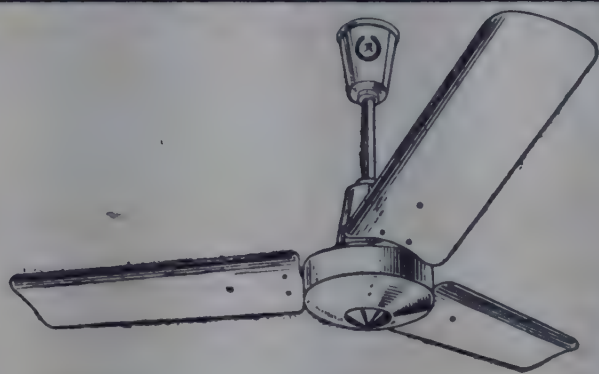




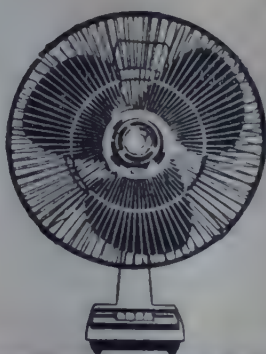
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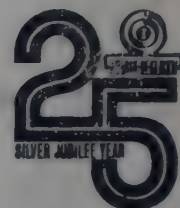
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## Who Are the Non-aligned?

EVER since the first non-aligned conference in September 1961 at Belgrade, the movement of the non-aligned has progressively grown at least in size. There were 25 participating nations at Belgrade. At Cairo in October 1964, the number went up to 47. In September 1971 at Lusaka there were about 60 of them, and three years later, in Algiers in September 1973, there were 74 full members, and over a dozen observers and guests. The fifth meeting of the non-aligned which has just ended in Colombo had about 85 participating countries, not including observers and guests. The movement is undoub-

tedly marching on.

By all accounts, India has every reason to congratulate itself over the outcome of the latest summit. Unlike in Algiers three years ago, there were no open disagreements among heads of delegations. Neither Fidel Castro who vehemently condemned those who suggested that the Soviet Union might be transforming itself into yet another imperialist country, nor Norodom Sihanouk who had riposted, "If the Soviet Union is really in the anti-imperialist camp, why does it not break its ties with the Lon Nol government?", was present at Colombo. It would be

idle to pretend that there were no disagreements at Colombo, especially in view of the vastly increased membership of the movement, and also in view of the serious divisions among the members. It is unlikely, for instance, that Morocco, Algeria and Mauritania would have had a common perspective over the question of Spanish Sahara. In fact, it is difficult to think of many non-aligned countries who do not have serious problems with their immediate neighbours, and not all these problems can be attributed to the heritage of imperialism alone. But despite all these divi-



sions, the whole affair seems to have been managed with reasonable efficiency and, with the help of the procedural device of dissenting countries recording their 'reservations', the resolutions and declarations have all been passed or adopted unanimously.

India's reasons for gratification are not confined merely to tactical, procedural gains. No doubt acrimonious, bilateral issues were avoided, except for such ineffective outbursts as those by Bangladesh. But more positive, from India's point of view, has been the fact that some of its constant policy objectives ever since the first Afro-Asian Conference (Bandung, 1955) have been more than fully realised. Among these objectives are that there should be no second international gathering exclusively of countries which have freed themselves from imperialism since such a gathering would automatically include China and Pakistan; that there should be no permanent secretariat of the non-aligned countries; that indeed, there should be no attempt to arrive at a clear and specific definition of who in fact is non-aligned; that the present practice of having resolutions adopted by consensus rather than by vote be continued. In fact, after Bandung 1955 and Belgrade 1961, there was much controversy as to whether there should follow a second 'Bandung' or a second 'Belgrade', and India narrowly won when a second 'Belgrade' took place in Cairo in 1964. That was a famous victory, though the non-aligned movement itself was in a rather poor way then. The second 'Bandung' scheduled for June 1965 at Algiers was effectively postponed (and later killed) because of the fortuitous circumstance of Ben Bella's downfall. Since then, except for some uncomfortable moments at Algiers three years ago, what one might call the broad Indian position has been endorsed again and again in succeeding meetings of the non-aligned. Indian politicians and bureaucrats have every reason to congratulate themselves.

Having said this, one still wonders whether there was any reason for India to have exerted itself so much to thwart Pakistan's attempts to be present at Colombo. With the near-universal participation of independent Africa and most of Asia (barring Japan, Iran and Thailand and, of course, China and Pakistan) in the Colombo meet, geographically at least there is little contradiction between the Afro-Asia of Bandung 1955 and the non-aligned of Colombo 1976. If Portugal, Rumania and the Philippines — all ad-

mittedly members of military pacts or having foreign bases on their territories — could, by some mysterious process of 'consensus', be found to merit the status of observers or guests, why did not the same consensus process operate in favour of Pakistan? Logic alone cannot explain the different shades of 'non-aligned-while-being-aligned' that were evidently discovered at Colombo. And as for China, that country is in many respects the most non-aligned in the world at present, and certainly less tied (whether formally through a military alliance, or informally, and more insidiously, through the relationship of being a client state) to the big powers than many prominent members of the non-aligned movement.

The substantive content of the Declaration adopted at the summit has been equally satisfactory for India. It is still not clear which were the seven countries that recorded their 'reservations' about a resolution confirming "the right of the land-locked countries to free access to and from the sea"; but apart from this, the Economic Declaration, especially in view of the fact that there is no reference to border disputes or sharing of the resources of international rivers, seems most satisfactory. While the various political resolutions take the mandatory swipes at imperialism in action in the yet-to-be liberated areas of Africa, and while a lot of indignation is expressed at the continuing attempts of imperialism to destabilise established third world regimes, the Economic Declaration in essence constitutes a plea to the same imperialism to be more generous and understanding towards the aspirations of the non-aligned countries. That imperialism is a major enemy of the people of the world struggling to be free is self-evident. What was perhaps necessary was a more precise definition of this imperialism, its character, its ability to manifest itself in a variety of garbs, its ability to articulate the most liberal and even socialist slogans while in fact conducting ruthless exploitation of the people of the third world countries. Even more important was the need to identify and define the links between imperialism and domestic forces in many non-aligned countries. While imperialism's attempts at destabilisation deserve to be condemned in the strongest terms, there is also the need to face the fact that many of the regimes among the non-aligned countries survive on the strength of their political, military and economic ties with imperialism.

The Economic Declaration also has a lot to say about the continuing disparities between the rich and poor nations, the unequal terms of trade and exchange between them, the need to secure higher prices for raw materials and assure lower prices for manufactures — in fact, the whole plaint of the various UN conferences on trade and development is, quite appropriately, renewed in the Declaration. It also speaks of the huge amounts that are allocated to the military budgets in the developed countries whose annual expenditure on defence is estimated at around \$ 300 billion, and goes on to suggest that if an effective disarmament agreement could be brought about among the major military powers, a substantial portion of the money now spent on manufacture and stockpiling of weapons of destruction could be diverted towards the development of the poorer countries. But it is useful to bear in mind that, even with the severely limited domestic resources at their disposal, the poorer countries themselves have not been exactly lagging behind in their enthusiasm for vast, unproductive defence establishments in their countries. Consistently, the poorer countries have not merely diverted scarce domestic resources to building up military forces, but have also been among the most pliant customers of the very same big powers who are now being exhorted to cut down their military expenditures.

Further, "the new economic order" based on "equity, sovereign equality, interdependence, common interests and co-operation" would, one presumes, presuppose not merely generous concessions from the wealthier countries, but also steps taken by the poorer countries themselves to effect a measure of social justice for their own people. The 'economic aggression' spoken of in the Economic Declaration has been practised not merely by imperialism against the poor countries, but by local oligarchies within the poor countries against their own people. And just as imperialism has the ability to masquerade behind a facade of liberal and even socialist pretensions, the 'native' exploiters too have been able to practise their deceit and loot in a most cunning manner, mouthing progressive slogans all the while. So the prospects are that in many non-aligned countries we are going to have more and more rhetorical flourishes directed against imperialism on the one hand, and continued collaboration with the same imperialism on the other.



NEW DELHI

## Up the 'Pragmatic' Road

B M

THE conditions created by the Emergency, the government has claimed, provide vast scope for wide-ranging innovations and initiatives in the field of economic policy and management. There is little doubt that in some ways the economic situation today is much better than it was a year ago and more especially two years ago when inflation was at its peak and had created severe strains and uncertainties all round. Inflation has been brought under control, though, as the erratic behaviour of prices in the first quarter of the current financial year showed, inflationary forces in the economy have not yet been entirely eliminated.

There have been two bumper crops in succession. A large buffer stock of foodgrains has been built up. Industrial activity is showing signs of revival and public sector undertakings in particular are recording impressive gains in production and profitability. Hopes have been held out of a 10 per cent or even higher rise in industrial production in the current year. If the large number of workers affected by lay-offs and closures are ignored, it may be claimed that there has taken place a striking improvement in industrial relations. The number of mandays lost due to strikes has indeed fallen dramatically.

The strains on the external account have also greatly eased. There has been a spurt of remittances from Indians abroad, which have gone to swell the foreign exchange reserves. There is also a steady and increased flow of foreign aid and heightened interest on the part of foreign private capital in India which is expected to result in a marked pick-up in foreign investment.

All these favourable factors encouraged the government early this year to try to introduce some changes in the deflationary policy launched late in 1974 and to revive the development process. The sizeable increase claimed in Plan outlay in the current year's budget was a green signal for the Planning Commission to resume work on updating the draft Fifth Plan.

The budget proposals for 1976-77, the import policy, the clarification and amplification of the guidelines issued under the Foreign Exchange Regulation Act and a series of modifications

and refinements in the whole gamut of industrial policies, taken together, constitute a package of measures which, the government hopes, will revive development. The budget presented what is described as a pragmatic strategy for giving a push to investment and industrial activity. Tax rates on personal and corporate incomes were lowered on the ground that this would bring down tax evasion, improve tax collection and encourage saving and investment. Several other fiscal measures introduced were similarly expected to stimulate growth. The problem of demand recession in some industries elicited substantial excise reliefs and these, combined with the reduction in personal taxation, were expected to generate sufficient demand to beat back recession. No significance was attached to the fact that many of the industries which have been granted the benefit of excise relief produce luxury items of elitist consumption.

The import policy was another step wholly in tune with the new pragmatic economic policy. The declared objective of the policy was to maximise utilisation of production capacity by providing liberal imports of needed inputs. The yawning trade gaps in the last two years did not deter the government from providing for an increase of 15 per cent and even more in imports for industry. A comfortable foreign exchange reserve position and the expected smooth inflow of foreign aid are expected to take care of the import bill.

### DILUTION OF FERA

The clarification and amplification of the guidelines issued under the FERA are designed to offer a wide range of choices for foreign firms in the expansion and diversification of their activities. The new guidelines were given retrospective effect in order that companies which had already diluted their equity or had taken other action on the old basis may become entitled to adjustments on the new basis. Although FERA essentially applies to foreign firms already operating in the country, its possible impact on new investment has figured very much in the discussions between Indian officials

and visiting teams of foreign businessmen. The ready response of the government to the suggestion made in the Indo-US Economic and Business Commission for "practical and clear rules for entry of foreign investment" has received gracious recognition and approval by foreign business interests. The widely publicised comment of the official journal of the US Department of Commerce in this connection is worth noting. It has commended the "pragmatic policy changes" embodied in this year's budget and has expressed the view that there are "attractive opportunities for US firms" in the Indian market.

New capital investment from abroad is, of course, not easy to attract. The foreign investor is not easily reconciled to distinctions between priority and non-priority industries and instead goes by the criterion of profitability. How far the pull of a relatively large market with comparatively cheap labour will attract capital from abroad has yet to be seen. But at any rate foreign firms already in India can now hope to expand and diversify their activities under hospitable conditions. The government and business interests in this country expect that the enlarged scope opened up for foreign firms will stimulate economic activity on a broad front, both in the public and the private sectors.

The modifications of industrial policy and the licensing system which have been made are frankly designed to enlarge the area of free enterprise. This is considered necessary for promoting higher production, fuller utilisation of capacity and larger investment. Streamlining of procedures, liberalisation and relaxation of regulations and regularisation of illegally-installed capacity and altogether exemption from licensing in many cases have indeed transformed the industrial licensing system beyond recognition. The private entrepreneur can no longer complain that the licensing system is a hurdle in his way.

The industrial licensing system was conceived of as an instrument for regulating the allocation of investible resources, raw materials and skilled manpower which are in short supply according to a scheme of priorities. Bureaucratic delays, abuse and corruption did certainly distort the operation of the system. In spite of an intricate and elaborate system of controls, the pull of market forces did lead to the evolution of an industrial structure in the country which rests on a narrow base



of elitist consumption demand. A shrinkage in this demand, such as came about in the wake of the latest bout of inflation and the deflationary policies adopted to combat it, at once creates a crisis. This is the heart of the economic problem that the government has to contend with. The new fiscal and other measures are the government's response to this situation. The emphasis is on fuller utilisation of already installed capacity. The argument that such an approach may result in pre-empting scarce resources for subsidised production for elitist consumption and further aggravate the shortfalls in investment and production in the high priority areas for meeting the — present and future — requirements of mass consumption is brushed aside. A 'pragmatic' policy for achieving high growth rates cannot, it is argued, bother about such considerations.

This also has implications for the allocation of resources and the respective claims of the public and private sectors on the surpluses available in the economy for investment. In spite of the

many loopholes in the official schemes for mobilisation and allocation of resources and the generous flow-back of resources from the government to the private sector through financial institutions and other channels, the complaint of the private sector in the past was that the requirements of the public sector were treated as primary and those of the private sector as residual. This was seen as an intolerable restriction on the growth of the private sector. This trend has now been decisively reversed. Hence the satisfaction in business circles and their new hopes of thriving and expanding within the framework of the mixed economy.

The progressive taxation system has thus lost its thrust as an instrument either for revenue-raising or for moderating income disparities. The stress is now on finding new and non-inflationary means for raising resources for financing government and public sector expenditure. No contradiction is thus seen between income-tax reliefs for upper income brackets and excise relief for upper income consumption,

on the one hand, and impounding of wages and DA, on the other. The proposal to invest the compulsory savings of workers in private industry is a logical extension of the same approach.

#### AGRICULTURAL-INDUSTRY LINK

The agricultural sector occupies a crucial place in any overall scheme for the stabilisation and development of the economy. The pattern of foodgrains production and marketing that has evolved in the last decade under the impact of the new agricultural strategy has vital implications in this context. The strong large farmer-trader combination now exercises a powerful influence on market supplies and prices of foodgrains and of all agricultural products generally. The recent rise in the prices of a whole range of agricultural commodities, even when there have been bumper harvests, underlines this.

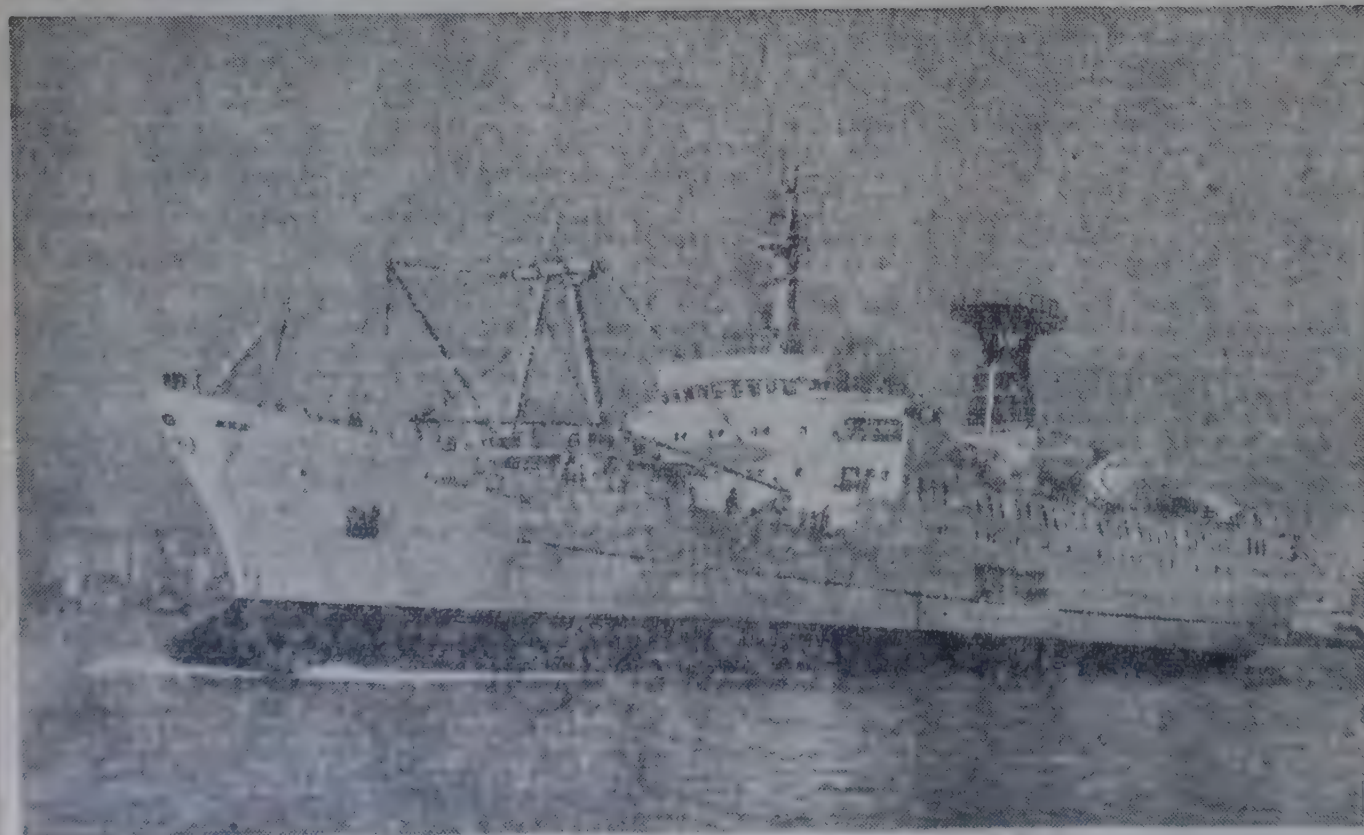
The new agricultural strategy was designed to secure surpluses of agricultural raw materials for industry and

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oodgrains for the urban consumer. The 'viable farmer' is relied upon to increase production through the use of modern inputs provided at subsidised rates and to respond to incentive prices by offering larger marketed surpluses. This has inevitably resulted in the emergence of new strains and stresses within the farming community as well as between agriculture on the one hand and industry and the consumers of agricultural produce in general on the other. With the marketed surpluses from agriculture becoming more and more costly and the incremental income of surplus farmers exempt from taxes, the whole basis of saving and capital formation in the economy was bound to undergo significant changes. Hence the new stress on a direct relationship between industry, trade and farming. The role of the public sector in industry and of land reforms in agriculture has to be accordingly trimmed and must come down in the order of priorities in economic policy and management.

The revival of work on finalising the Fifth Plan has to be viewed in this changed context. The aim of the Planning Commission is very modest just now. It is merely to update the base and target figures of the Plan and to

make consequential adjustments in the financial allocations. The new trends in economic policy are clearly in conflict with some of the fundamental premises and policy assumptions of the draft Plan. But the Planning Commission would rather not embroil itself in any revision of the draft on that score. Even so, the new scaled down targets in the updated Fifth Plan will have to face grave uncertainties about resources. After all, mobilisation of resources for public sector investment no longer holds an important place in official policy. In addition there is the snag arising from the low absorptive capacity of the economy for the goods and services, including skilled manpower, which public sector enterprises offer.

Scaling down the physical targets of the Plan even in the core sector is thus accepted as inevitable and the only realistic approach given the objective of full utilisation of the existing structure of productive capacities. In this scheme of things, export promotion has acquired new dimensions, as the answer to the constraints of the home market and internal demand. The implications of all these developments extend beyond chopping and changing the targets of the Fifth Plan and add up to an altogether different pattern of development.

position in the revived cold war between Moscow and Washington. His position is certainly not one of non-alignment. The Pakistanis, on the other hand, have carried the stigma of being an aligned power for far too long. In terms of actual international politics they have, over the last decade, played an almost exemplary nonaligned foreign policy game. The point is that presently the nonaligned, like the Brahman of Indian philosophy, is undefinable. It is almost a case of "I think and therefore I am"!

This being the case, the task of the Colombo summit is going to be pretty difficult. Those who assemble there will have to take into account the heightened level of cold-warish tensions between the Soviet Union and the USA. The situation which created the concept of nonalignment seems to be with us again with renewed vigour. The non-aligned, if nonalignment has to have any meaning at all, have got to express themselves on this problem. So far one has read or heard precious little on the problem through the nonaligned news-pool.

Perhaps quite the contrary is true. The concern which Nehru showed about the superpower relationship at the 1961 Belgrade conference is now missing not because the situation has changed but because nonalignment has now become a coveted label and very little else. The political division of the world is very much with us, as it was throughout the fifties. It was unthinkable then to be nonaligned and yet to be leaning to one side. Now it seems clearly possible. In short the political content of nonalignment has disappeared into the thin air. Before long almost everybody except the advanced states of Europe, both red and non-red, and North America and Japan would be the nonaligned states.

And, why not, one might legitimately ask? The problem is that the non-aligned world would then be synonymous with the third world; in short, with entire Asia, Africa and Latin America. The questions which the summit is going to discuss are in reality the questions of the third world, the developing world. The term 'nonalignment' then becomes redundant. It then becomes, by implication, a device to keep some third world countries out of these conferences because they do not, for good reason, call themselves nonaligned. Their reluctance has got something to do with their fairly well defined and articulated position on the present

## INTERNATIONAL AFFAIRS

### *Festival of the Nonaligned*

G P D

THE foreign ministers and the foreign secretaries with their entourages have started pouring into Colombo. Soon the heads of governments will join them. Colombo must look a very colourful city right now. The streets would be full of big cars, colourful national flags, piloting policemen on their motor-bikes, and so on. The festival of the non-aligned has begun.

Festivals come easily to oriental minds, as easily perhaps as *mantras*. One can, therefore, be fairly certain that we shall have an abundance of both at the Colombo summit. The *mantras* will be recited with all the necessary solemnity and in unison. It will make a nice chorus too as the number of the nonaligned has grown nearly as fast as the population of the third world. The co-ordinating bureau itself has had to raise its membership from seventeen to twenty-two. The triumph of nonalignment lies, some people would argue, in the fact, that everyone is non-aligned, except of course people like

the Americans, the Soviets and the Chinese. After all, don't all castes join festivals? You should not make small, petty distinctions in the presence of the God of nonalignment!

It is interesting to see how a sound power strategy and a specific world-view have changed over a period of time. When Nehru formulated the policies of nonalignment, he had the fierce cold war between the two superpowers in mind. At that time nonalignment meant a course of action in foreign policy which would not further sharpen this cold war and the resultant tensions. In short, being nonaligned involved a specific relationship with the two power blocs wherein a nonaligned state tried and avoided becoming dependent on either power.

Most of the nonaligned gathered at Colombo do not in fact understand nonalignment in this sense at all. It would be hard to argue that President Sadat, is any longer particularly non-aligned. In fact, he has taken a clear



world situation. It is interesting, for example, that China with all its anger against the Soviets has so far not described itself as a nonaligned state. Its view of imperialism may be debatable, but it claims to be firmly against 'imperialism'; that is to say, it would not like to call itself nonaligned. On the other hand, a country like Vietnam wants to call itself nonaligned which, in fact, it is not. It is a socialist state firmly opposed to imperialism and capitalism, and so forth. It is clearly on one side. It is not nonaligned in the political sense. In short, the problems which have got all the crowd together in Colombo have got nothing to do with alignment or nonalignment. They are problems of the developing world in relation to the developed world.

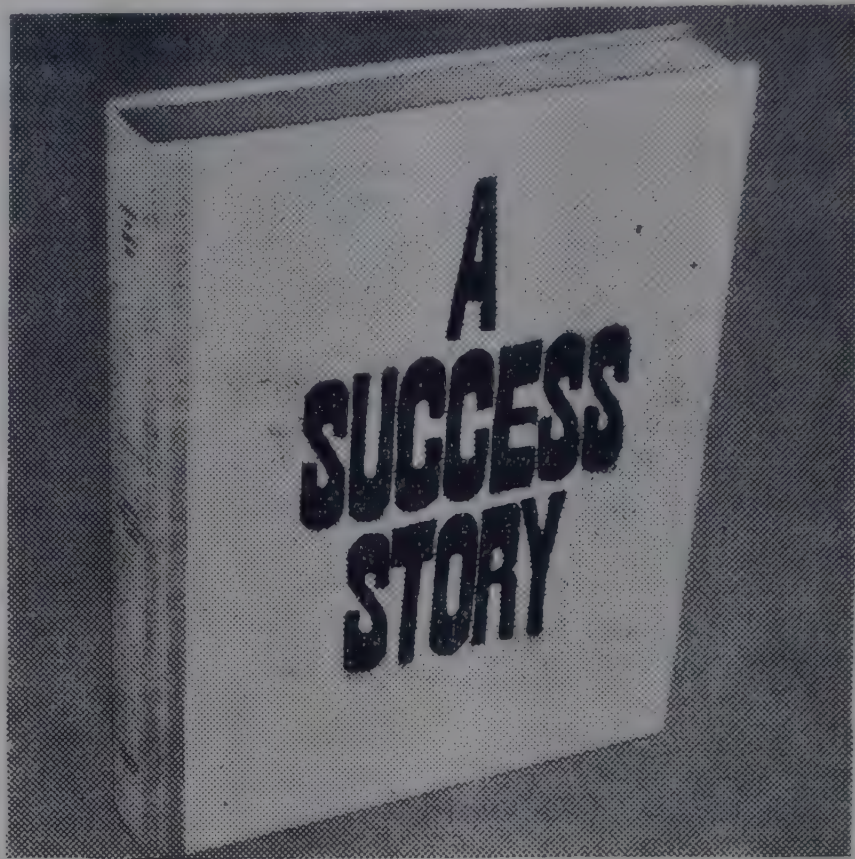
The new economic order, therefore, cannot be a creation of the self-styled nonaligned states alone. It is as much a concern of the Sadats, Bhuttos and Indira Gandhis of the world as it is of the Phan Van Dongs and Hua Kuofengs. It is difficult to see how a unified strategy towards the creation of a new world order can emerge without all those who are interested in its emergence sitting together. The present situation needs really a tricontinental conference. You cannot usefully discuss the new economic order without China being a party to it. Just as all plans of Asian security are meaningless without China (or, for that matter, India), all plans of Asian prosperity would be as meaningless without China.

It might be a little improper perhaps to ask the other no less important question at the time of the festival. But it needs to be raised all the same. Most of the leaderships which swear by new economic order have failed to create a new economic order within their own "nonaligned" countries. The hapless people of Asia, Africa and Latin America have been repeatedly promised "a new economic order" within their countries. The autocrats and the oligarchies which rule them or have ruled them have done little by way of creating the 'new economic order'. So one will see a peculiar spectacle in Colombo. Quite a few statesmen who have denied justice to their own people will ask for justice from the bigger bullies of the international economic and political system. As long as there is a reluctance to see this, the new economic order will remain only a slogan. The new economic order cannot be created unless these statesmen are willing to generate forces within their domains which will contribute to its creation. One does not

know how many in the so-called 'non-aligned' world really want that to happen. Not many, one reckons.

But then, meanwhile, the festival can go on. The festival needs *mantras* and the nonaligned have over the years

produced enough. Besides the nonaligned newspool will have a lot to feed their people, otherwise misled by the Western news agencies. That may be good enough till the nonaligned decide to meet again!



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# The Ideology of Population Control

Mahmood Mamdani

*This paper seeks to contribute to the development of a scientific explanation of the rising rates of natural increase in population in most backward capitalist countries and thereby to deepen the critique of neo-Malthusianism and attempt a redefinition of what has been called the 'population problem'.*

*The author analyses the reproductive behaviour of two social groups that form the bulk of the population in the Indian social formation: the working peasantry and the unemployed. He tries to delineate those historically created social relations that explain the reproductive behaviour of these groups.*

*The author hopes to show, first, that it is not high population growth that explains India's poverty but the contrary; and, second, that this poverty itself is not a natural but a historical phenomenon: its reproduction cannot be understood unless we analyse it as the result of social relations which themselves must be placed in the context of a system of oppression — imperialism.*

THE principal explanation for India's continuing poverty advanced by bourgeois social science over the last decade has been the theory of overpopulation, particularly in its neo-Malthusian version. Neo-Malthusianism seeks to establish a relation between national resources and national population by projecting into the future the existing development of each. Shorn of its particular trappings, substantially the argument is: the rate of population growth is outstripping the rate of resource development; the result: imminent catastrophe — hunger, starvation and social conflict — both nationally and internationally.

The left critique of neo-Malthusian thought has sought to argue that its very presentation of the problem has been *ideological*: that the national societies are class societies and in class societies appropriation has a *dual* aspect. It is the appropriation both of nature and of the producers, natural appropriation as well as social appropriation. The control over national resources is thus not as much national as by particular classes whose objective interests dictate its mode of utilisation and its future growth in size and composition. Secondly, the appropriation of these resources is not just within a national but primarily in an international context and thus analysis must situate itself at the level of the totality: the international capitalist system.

A critique at the level of ideology, however, is only a first step. Though a necessary step, it must be followed by a *scientific* explanation of what is a real phenomenon: the rising rates of natural increase in population in most backward capitalist countries. It is the purpose of this essay to contribute to the development of such an explanation and thereby deepen the critique of neo-Malthusian thought as well as attempt a redefinition of what has been called

the 'population problem'.

A scientific explanation is possible only if a phenomenon is located in its specificity, in this case both social and historical. Birth rates are not territorially specific as much as specific to particular social groups. Anybody familiar with the demography of a town or a village knows that the reproductive practice of land labourers is different from that of the landlords and of the petty bourgeois from that of the proletariat or the unemployed. Reproductive behaviour is not a natural but a social phenomenon. Territorial birth rates or rates of natural increase are an abstraction that do not advance as much as mystify our understanding. Secondly, this same behaviour is neither idiosyncratic nor accidental but is substantially *reproduced* over time. The "population problem" would only exist if there was a certain uniformity over time of the reproductive behaviour of social groups. In other words, our concern with reproductive behaviour is not in its individuality, as a subjective phenomenon, but as one both social and objective. The question that must be posed then is: What are the *social relations* that underlie these practices? Furthermore, the social relations themselves did not always exist but were historically created. The very relations must then be understood in their historical specificity.

This essay will attempt an analysis of the reproductive behaviour of two social groups that form the bulk of the population in the Indian social formation: the working peasantry and the unemployed. Its purpose will be to delineate those historically created social relations that explain the reproductive behaviour of these groups. What we hope to show is, one, that it is not high population growth that explains India's poverty but the contrary, and two, that this poverty itself is not

a natural but a historical phenomenon: its reproduction cannot be understood unless we analyse it as the result of social relations which themselves must be placed in the context of a system of oppression, imperialism.

## I

### The Working Peasantry

What are referred to as the underdeveloped countries today were incorporated into the world capitalist system in the last four centuries. Their incorporation, however, was not uniform but uneven. The capitalist mode of production was implanted only in the territories of colonial *settlement*; in the regions of colonial *domination*, however, capitalism did not simply destroy the pre-capitalist modes by appropriating the peasantry and transforming it into a class of wage-labourers. The process, on the other hand, was far more complex. The pre-colonial modes were partially destroyed, restructured and then incorporated into the world capitalist system as *subordinate* to the capitalist mode of production internationally<sup>1</sup> — to produce for it, on the one hand, cheap raw materials, and on the other, cheap labour-power, thus cheapening the elements of both constant and variable capital. Henceforth, the accumulation needs of imperialist capital would dictate the content of production in the colonies. In the emerging social formation, while capitalist production was confined to small pockets, imperialism dominated overall production through the agency of the state; at first colonial, later neo-colonial.

For our purposes, it is not necessary to go into all the ramifications of the above process, resulting in the creation of backward capitalism. Suffice it to note that in these social formations,



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capitalist production was confined to small pockets. Outside of these pockets whatever the relations of production on the land, be it the small tenanted plot subject to landlord appropriation or peasant commodity production dominated by commercial/money-lending capital, the labour process remained pre-capitalist. The producer remained united to his means of production and the unit of production remained the family.

That the family is the organisational form within which social production takes place has very important implications. It means that socialisation for productive labour is also carried on within the family: the relations of work are reflected in the relations within the family and the discipline of work becomes the discipline of the family.

Family relations among the working peasantry<sup>2</sup> remain rigid and hierarchical. The parent is the head of the family and exercises absolute control. The parent-child relationship is simple: the parent commands, the child obeys. Age and experience are the yardsticks of merit and claim to authority. Parental chauvinism flourishes but is not simply an attitudinal phenomenon. The point is that family relations, sustained by the nature and relations of work, make it possible for adults to control the time and labour of children, including the fruits of that labour.

The qualitative difference with developed capitalism should be quite clear. There the unit of production is no longer the family but the capitalist enterprise. Similarly, socialisation for work is carried out not as much within the family as within the school or the prison. The producer is not as much a family member as a wage-labourer, a capitalist or a member of the salariat. The family here remains but a unit of consumption and procreation, *no longer a unit of production*. Thus emerges the bourgeois family, its relations being part of the material basis of the ideology of individualism and individual freedom. The ideology of the "peasant family" on the other hand, is that of loyalty and unity; it forms the ideological basis of parental authority, over children.<sup>3</sup>

Control over children's labour, however, can be of material consequence only if the labour process allows for the productive use of child labour. In other words, what use can the family make of children's time? Another characteristic of backward capitalism is that, outside of the small pockets of

capitalist production, the forces of production remain backward. The technology of production in agriculture remains low. In fact, all throughout the colonial period, there has been little change here. Unlike advanced capitalism, backward capitalism does not revolutionise production. The result is two-fold. First, an expansion of total output is not the result of increased investment on land in the form of machinery (i.e., through an increase in the organic composition of capital) but the result of an increase in the total labour exerted in agricultural production, a result of an increase in both the working time of the peasant and an increase in the number of working peasants. Secondly, given its low technical basis, the production process is characterised by activities which include numerous tasks that are both simple and repetitive: from taking care of the grazing, cleaning and feeding of farm animals to the laborious task of weeding, and to some extent sowing and harvesting. Outside of productive labour, the presence of children in the house can also assure a certain ease in life. The smallest children perform a variety of tasks that the adults regard as tedious, time-consuming and tiresome. When too small to do any work, they will be cared for by older children who include them in their play or carry them on their hips when doing work such as tending to farm animals. As a Punjab farmer put it:

A forest is not made of one tree

A Jat (farmer) is not made of one son.

It is precisely because children's activity can be of considerable gain to the family that their time and their life are closely regulated by the family, more so as they become older. The very nature of childhood is affected: there is no adolescence. Adolescence is a category specific to advanced capitalism. In backward capitalist formations, on the other hand, there is only childhood and adulthood. When they grow up, children become not youths but young adults.

It might be pointed out that the extremely high levels of unemployment and underemployment in agriculture must limit the access of children to productive labour. Unemployment, however, is much more characteristic of entire families, not of individuals. In agriculture, adult and child unemploy-

ment go hand in hand as family unemployment. Without access to means of production, the family moves. The movement of the pauperised and appropriated poor peasantry will be dealt with in the next section.

The nature of what has been called "underemployment" must also be concretely grasped in the rural context. Given the low technical basis of production, the rhythm of work corresponds to the rhythm of nature and is highly uneven. Periods of intense work alternate with periods of low activity. Harvest, weeding and sowing times — covering over half the year — are the peaks of productive activity corresponding to an acute need for labour. For example, in District Ludhiana in the Punjab, with a tractor and all the necessary implements, it takes three people to work fifty acres of land. Without a tractor, the same land requires at least fourteen people around the year, and at least twenty at sowing, weeding and harvesting times. As the "Rural Labour Enquiry" of the Ministry of Labour concluded: "What facilitates their absorption [the absorption of child labour] in the labour market is the shortage of labour in the peak agricultural seasons in the local area."<sup>4</sup> In these periods of high employment, while it is the family that works and saves, it is the parents who control the savings.

To grasp the relation between rural exploitation and the rural family it is important to bear in mind that the social relations of production, however reminiscent of pre-capitalist relations, derive their motion from their subordination to imperialist accumulation internationally. Peasant production which used to be petty production for use is now petty commodity production for the international capitalist market. While imperialist capital exploits the peasant producer, it does not do so directly but through the mediation of local appropriating classes. In the countryside, the appropriator in the first instance, the one that immediately pumps the surplus out of the petty producer is a *monopoly-based* commercial and/or landed class. The class struggle in the countryside pits the *monopoly* power of the merchant or the landlord against the *fragmented* producers. The result is the appropriation of the petty producer that leaves him with no more than his bare subsistence needs and certainly no surplus to expand the technical basis of his production. There is



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neither a movement from manual to mechanised labour nor a rise in the productivity of labour as agricultural surpluses are siphoned out — immediately by unproductive classes, and through their mediation, by the local and the imperialist bourgeoisie — and not reinvested in agriculture. Whatever the form of appropriation of the direct producers and whatever the form of competition between them, the only means by which the individual producing unit, the family, can increase the physical product at its disposal is by increasing the labour-power at its disposal, i.e., through high rates of reproduction. Even the government's own "Rural Labour Enquiry" empirically grasps the significance of rural child labour: "They [children under 15] are pressed into employment mainly to supplement the meagre income of chronically poverty stricken rural households."<sup>5</sup> High birth rates are not the cause of peasant impoverishment; they are the response of an impoverished peasantry.

Furthermore, the hierarchical relations within the family and adult control over children's labour means that for the producing family, with each additional child, the cost of having a child declines and the benefit rises. In the absence of a class organisation of the exploited the only possible (not necessarily effective) form of security for peasant producers, not only against social but also against natural calamities as famine or floods, is the family. As a middle peasant in northern India put it:

A rich man has his machines, I have my children.

It's that simple.

The ideology in peasant cultures incessantly emphasises the virtue of child-bearing. In India, it is considered one's *dharma* (religiously sanctioned social obligation) to have children: to desire as many children as possible is not only in the natural order of things but also an indication of virtue. Marriage vows and blessings put emphasis on the good fortune of having many children. Folk songs, usually sung on occasions such as marriage, childbirth or the harvest sing praises of the prolific mother and the fertile soil. A popular theme running through many stories is the love of the mother for the son: it is considered the purest form of love. Sanctions against childless women further underline the necessity of children. In

other words, ideology reinforces the demands of reality.

## II

### The Appropriated Masses

That the agricultural surplus is siphoned out of agriculture has decisive consequences for the nature of class differentiation in the countryside. While the lower sections of the peasantry are increasingly pauperised, a rural bourgeoisie which could employ the appropriated peasantry fails to emerge.<sup>6</sup> The rural unemployed, unable to find work in the countryside, flock to the cities. The high figures of rural-urban migration in India are testimony to the existence of this process.

The ranks of these appropriated masses are swelled by another social group: the pre-capitalist craftsmen whose material base was undermined with the expanded import of metropolitan commodities during the colonial era. The craftsmen and artisans provided not only consumer goods for the cities but also the basic implements for rural labour such as the plough. Metropolitan imports of both consumer goods and implements of labour made these skilled labourers redundant, in the first phase of colonialism in fact reducing all labour to the lowest common denominator, unskilled agricultural producers engaged in the production of cash crops for export to the metropolitan markets. The bulk of the skilled crafts and artisan workers join the ranks of the appropriated urban masses.

Certainly, this same process — the appropriation of the poor peasantry and the redundancy of skilled pre-capitalist craftsmen — occurred in early western capitalism. There was, however, one critical difference. In advanced capitalism this process was followed by another: proletarianisation. What we find in backward capitalism, on the contrary, is appropriation without proletarianisation.<sup>7</sup> In order to understand this, we must turn to the nature of industrialisation and the structure of employment in the urban economy.

The character of industrialisation in India bears a direct relation to the limited and distorted development of the home market. That the bulk of the Indian population are petty producers on land has a dual effect: one, given the low technique of their production, agriculture provides a very limited market for industries producing the means of production; two, given

that peasants produce their necessities (food crops and dairy goods) side by side with industrial crops, agriculture provides a very limited market for industries producing consumption goods. Thus, the home market for Indian industry is defined predominantly by the consumption needs of the propertied classes.

Thus, in the Department producing means of consumption (Department 2), it is the industries producing for bourgeois consumption<sup>8</sup> that take the lead. The content of the first phase of import substitution is nothing but the production within the internal market of those commodities that used to be imported before: durable consumer goods. Once the Department producing means of production develops, as it did in India in the late fifties and sixties, its growth is organically tied to the growth of industries for bourgeois consumption, which form the leading factor in industrial development.<sup>9</sup>

It is the production of commodities for bourgeois consumption, durable consumer goods, that form the objective basis for the collaboration between the Indian industrial bourgeoisie and the transnational corporations, for the latter provide the necessary technology. For our purposes, it is important to understand the consequences of this kind of industrialisation, using the capital-intensive technology of the transnationals, for the structure of employment in modern industry.

Factories and machines may multiply, but not always the workers in them. The development of the factory proletariat, workers in large-scale modern industry, is but a trickle compared to the expansion in industrial production. In India, according to official statistics, the percentage of working population living by modern industry fell from 5.5 in 1911 to 4.3 in 1931, registering an increase only in the 1950s, only to return to 4.3 in 1970!<sup>10</sup> The 1960 ILO report on India remarked that "during the first five-year plan, urban unemployment increased in spite of the rise in industrial production ... from 117 (index) in 1951 to 161 in 1956..."<sup>11</sup>

The dominant process in the backward capitalist economy undergoing dependent industrialisation is not proletarianisation but *appropriation without proletarianisation*. An entirely new social group emerges in the urban areas, the appropriated masses, living on the fringes of respectable society, at best casually employed. It would be a mis-



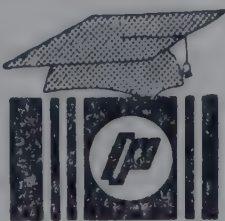
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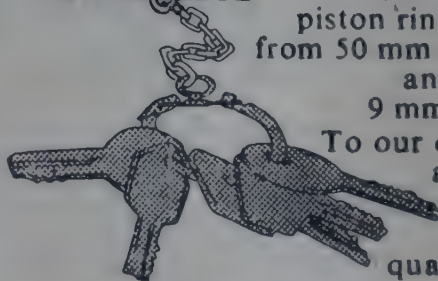


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take to see them as a lumpenproletariat or even as Marx's relative surplus population necessary to the smooth functioning of a capitalist labour market. Whenever employed, they form part of the working class since they are producers of material values from whom surplus-value is appropriated in the process of production; at the same time, employment in their case regularly alternates with stretches of unemployment which throw them into the ranks of the chronically unemployed. Why do casual employment and high population growth go hand-in-hand in this case?

The most important characteristic of the structure of casual employment is that it allows for child employment to a far greater extent than does modern industry. The 1969 report of the National Commission on Labour<sup>12</sup> points out that, unlike in "organised industries", child employment "persists in varying degrees in the unorganised sector such as small plantations, restaurants and hotels, cotton ginning and weaving, stone-breaking, brick kiln, handicraft and road building ... Under the excuse of preparing a boy for taking up productive employment as he reaches adulthood a small child is engaged to train his fingers in the required skills". The detailed discussion in this report enables us to identify two types of industries in which child labour is common, manufacture and domestic industry, and further, to give examples to illustrate these two instances.

The commission found "prevalence of child labour in handloom and powerloom units. Usually a weaver has as his mate a child of school-going age". Another "intricate operation where child labour is quite common" is brocade work. Here, the Commission noted the employment of boys who "looked between 8 to 10 years of age or even younger". In most of these cases, "the payment of the child was the responsibility of the adult worker whom the child helped", thus compelling the adult to facilitate the exploitation of child labour by capital. "A similar arrangement", the Commission noted, "prevails in carpet-weaving." Asked to explain why the parent does not avail of free education to send the child to school, the Commission pointed to the obvious: "The low earnings of the artisans are compensated by the income of his mate", and pointed out, "For him, an uneducated child is an asset."

Domestic industry provides two examples of intensive child labour in the

context of work organised along family lines: mat-making and bidi-rolling. Contractors distribute work in private dwellings "where workers take raw materials given by the employer or his contractor and hand over the finished product at the stipulated place".<sup>13</sup> The system of payment is by piece-rate and the nature of work allows for both female and child labour.

In urban centres proper, the centres of bourgeois consumption, children turned to shoe-shining, to cleaning cars or opening doors, to restaurant work. One form of activity in which young age is a positive asset is begging, here a regular occupation: it is *organised*, and in fact predominantly confined to children. Denied productive employment, the poor make demands on the 'conscience' of local ruling classes and their metropolitan tourist friends. For a member of the affluent classes it is difficult to walk a few yards in any of the urban centres of backward capitalism without hearing a call for "bakshish". Certainly, the family here doesn't possess the unity it does among the working peasantry: once they grow up, children might leave their families. All the same, in slum populations, it is not quite unusual to find children as important breadwinners in the family.

### III

#### The Ideology of Population Control

The decision by a couple located within the working peasantry or the appropriated masses to have a number of children is essentially a rational decision, a judgment of their social environment. Rationality does not exist in the abstract; it is concrete, the product of a particular social and historical context. The pitfall of neo-Malthusian liberalism is precisely its "rationalism", that it assumes a universal rationality and forgets that in a class society there exists class rationality.

The demand for population control may be rational in one class situation, but not necessarily in another. The "rationalism" of the neo-Malthusian *universalises* the situation and thus the rationality of a particular class: what is good for the bourgeoisie is good for all!

Ideological thought is not simply false. It is thought that presents an aspect of reality *as* reality and obscures the *relation* between the aspect and the totality. The specific historical relation between high rates of population growth

in particular social groups and their social oppression is obscured. How a problem is defined greatly affects the formulation of the solution. When the phenomenon is defined as the "population problem", its core assertion is that people are poor because they are too many. Exploitation is reduced to poverty and the explanation of poverty become the poor themselves!

### Notes

- 1 See Charles Bettelheim in appendix to Emmanuel Arghiri, "Unequal Exchange", Monthly Review Press New York, 1971.
- 2 The formation working peasantry excludes that section of the peasantry which was proletarianised and refers only to small commodity producers on land. I am aware that an analysis which makes a strict separation between the two, failing to analyse the relations between them, is unscientific. For example, in Africa, large sections of the proletarianised peasants are migrant labourers who return to their families after a period of wage-labour. The wife here becomes the petty commodity producer and the structure of the peasant family itself is altered. Partial observation leads me to think that though this alters the relation between the husband and wife it does not alter the parent-child relation. Nonetheless, in this social group as in others, only a concrete analysis of concrete social conditions can clarify to us the laws of population growth.
- 3 Certainly the "bourgeois family" can be found in the Indian social formation. Its existence, however, is class specific, located within the bourgeoisie or the urban petty bourgeoisie.
- 4 Government of India, Ministry of Labour, Labour Bureau, "Rural Labour Enquiry", 1963-65, Final Report, p 151.
- 5 *Ibid.*
- 6 The exception here would be the so-called "Green Revolution" in the Punjab. The tendency of monopoly capitalism to thwart the development of the productive forces in the countryside should not be interpreted in a *one-sided* manner. It doesn't preclude a limited and localised development of the productive forces. To explain such a development, however, we must take as our starting point the accumulation needs of capital and the concrete class struggle. Three points come to the fore so far as the "Green Revolution" in the Punjab is concerned. First, the initiative by the American oil monopolists to introduce in the Indian countryside high-yielding seed varieties that at the same time require high inputs of chemical fertilisers was an attempt by the oil monopolies to maximise their



profits by creating larger markets for the by-products of oil. Secondly, rural Punjab, unlike large sections of semi-feudal India, was not dominated by a politically powerful landed class. Semi-feudal exploitation in rural Punjab was principally mediated through moneylenders who were both localised and whose political strength had been considerably undermined during the Independence struggle. Finally, some reports from the Punjab countryside recently on the struggle between the new rich peasantry and commercial capital in the towns points to the re-emergence of moneylending, this time co-existing with capitalist forms of exploitation.

- 7 Once again, this tendency should not be interpreted in a one-sided manner. A factory proletariat does develop, and though of strategic importance, is limited in numbers.
- 8 By industries for bourgeois consumption, we mean industries pro-

ducing commodities the demand for which comes out of profits, not wages.

- 9 It is useful at this point to draw attention to Samir Amin's 4-sector model where he draws the distinction between an advanced capitalist and a backward capitalist economy (Samir Amin, "Underpopulated Africa", mimeo, Dar-es-Salaam):

- 1) Export Production
- 2) Capital Goods Production
- 3) Mass Consumption
- 4) Luxury Consumption

According to Amin, the determining relation in an advanced capitalist country is between capital goods production and mass consumption (2 and 3) but in a backward capitalist country between export production and luxury consumption (1 and 4). Even when the capital goods industries do develop in the latter case, they do in relation to the sector producing

luxury consumption goods, not that producing mass production goods.

- 10 Figures for 1911 and 1931 quoted in E Mandel, "Marxist Economic Theory", p 473; figures for 1970 computed from "The Indian Labour Year Book, 1970", Labour Bureau, Ministry of Labour and Rehabilitation, Government of India, pp 2 and 16. Under modern industry, I have included four categories: (a) Mining and quarrying, (b) Manufacture, (c) Electricity, gas, water and sanitary services, and (d) Transport, storage and communication.
- 11 ILO, "Why Labour Leaves the Land: A Comparative Study of the Movement of Labour Out of Agriculture", Geneva, 1960; p 123.
- 12 Government of India, Ministry of Labour, Employment and Rehabilitation, "Report of the National Commission on Labour", 1969; p 386.
- 13 *Ibid*, p 427.

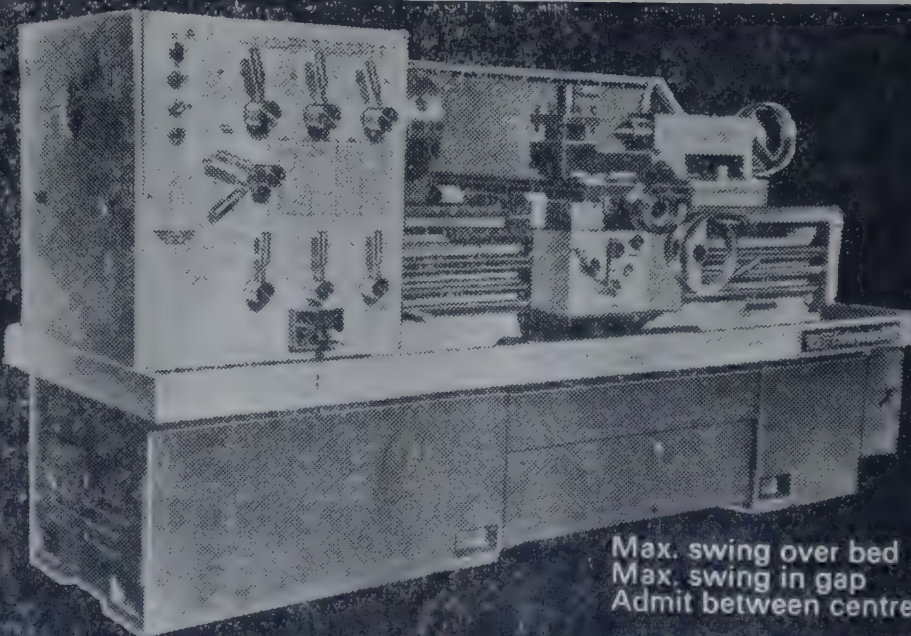
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# Population Growth and Economic Development

## A Counter-Argument

S K Rao

*This paper argues that the often-repeated emphasis on 'population control' as a means of generating economic growth makes sense only if one can postulate that the number of 'births prevented' is a function of the expenditure on birth control.*

*The author suggests, first, that it is doubtful that such a postulate is correct; and, second, that even if it is, it is not clear that economic growth is the outcome.*

### I

#### Benefits of Population Control

LET us, first, have a brief look at the supposed economic benefits of population control. S Enke, one of the prominent advocates in this field, reports the benefits of population control as follows:

... primarily a reduction in fertility alters a population's age distribution, so that the ratio of work-age to non-work age populations increases. Increased income and savings per capita result. GDPs, even after 15 years, are only slightly affected, an increase in capital stock largely offsetting a decrease in labour force. But this practically unaffected GDP is of course shared among fewer people when there has been a fertility reduction. Moreover, while fertility is declining, there is an additional reason for extra improvements in output per head. Prevented children are not lost to the labour force until after 15 years or so and meanwhile their absence means increased saving and investment per head. (Enke, 1974.)

The argument that control of population would result in economic benefits, thus, involves making the following statements:

- (a) As a prevented birth now will not affect the size of the labour force until after 15 years or so, there will be no immediate reduction in the size of the labour force. Therefore, total GDP should not fall and per capita GDP should rise in the first 15 years at least.
- (b) A rise in per capita product should enable a rise in per capita saving leading to a higher rate of investment.
- (c) Any fall in the size of the labour force in the period after 15 years may not lead to a reduction in total GDP, as the savings meanwhile would have resulted in higher capital per head, so that output per man should rise.

By and large, these statements seem to make sense at the aggregate level. Nevertheless, it is worthwhile making the following remarks.

First, one tends to overestimate the size of released consumption due to a reduction in numbers in the age-group 0-15 years by doing the arithmetic in

per capita terms if the per head consumption of a child is less than that of an adult. A 25 per cent reduction in population, affected primarily in the age group 0-15 years, need not necessarily mean that the released consumption would also be 25 per cent of the total.

Second, it is not clear that the savings rate is a function of the level of per capita income. It is one thing to suggest that a society with higher per capita income should be able to save more in the sense that the margin over essential consumption must be larger, but it is another to suggest that, therefore, saving will rise when per capita income rises. It can be argued, however, that whether the released resources are absorbed in the form of a rise in consumption or savings per head of the remaining population, it is still a benefit.

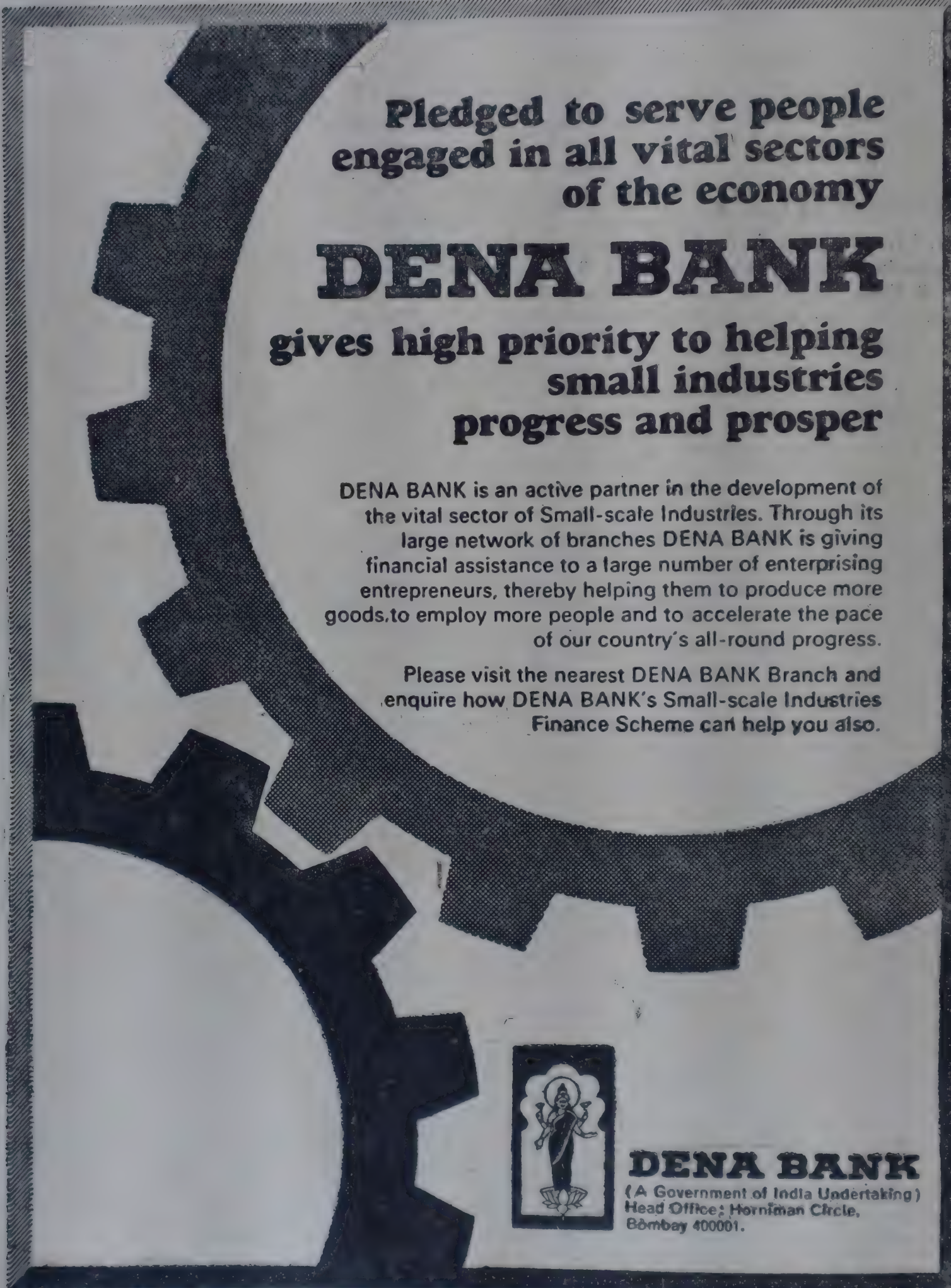
Third, a rise in per capita consumption or saving does not mean that everyone will share equally in this. We have witnessed a classic illustration of this in India during the sixties; per capita real income had increased by about 7-8 per cent between 1960-61 and 1967-68 or 1968-69.<sup>1</sup> At the same time, we find that the saving rate showed signs of a fall rather than of a rise; it stood at about 8.9 per cent in 1960-61, 7.9 per cent in 1967-68 and 8.4 per cent in 1968-69.<sup>2</sup> The stagnancy of the saving ratio in a period of rising per capita income suggests that the per capita real consumption must have increased. We, however, find that the proportion of the rural poor, defined as persons with per capita consumption below Rs 15 per month at 1960-61 prices, had probably gone up from about 38 per cent to 53-54 per cent in the same period.<sup>3</sup> All this clearly suggests that not only did the saving rate fail to rise as real per capita incomes rose, but also the resultant increase in consumption was confined entirely to the rich; nay, the rich even managed to increase their consumption at the expense of the poor.

One should, therefore, be rather cautious in demonstrating the benefits of population control in aggregative terms.<sup>4</sup>

But suppose we accept that population control does result in economic benefits as postulated and that it provides the necessary condition — a rise in per capita product — if not the sufficient condition for economic growth. The question is: can we consider population control a feasible policy?<sup>5</sup>

For, in the absence of such feasibility, to demonstrate that population control would result in substantial benefits is on the same level as to demonstrate that if rains fell each year in the required quantities and in the required order, agricultural output would be so much higher. That is to say, the notion of 'causality' involved here is rather peculiar. To make the point clearer, I might be allowed to quote E H Carr. While discussing the notion of causality in his book "What Is History?" he tells a story: "Jones returning from a party at which he has consumed more than his ration of alcohol, in a car whose brakes turn out to have been defective, at a blind corner where visibility is notoriously poor, knocks down and kills Robinson, who was crossing the road to buy cigarettes at the shop on the corner". Carr then goes on to ask: "What is the cause of this accident? (a) That Jones was drunk? (b) That the car had poor brakes? (c) That the visibility was poor? (d) That Robinson was a smoker, for otherwise he would not have been wanting to cross the road at that moment? (e) That the cigarette shop was located across the road? Of course, most of us would find it difficult to swallow the last two as the causes of the accident. Why? Because when looking for a cause we would like to concentrate on those factors which are open to manipulation and which constrain our freedom the least. Accepting (d) and (e) above as causes would imply that it is easier to manipulate the habit of smoking or the number of times people cross roads than the habit of drinking or driving cars with defective brakes; and that interfering with the freedom of smoking or of crossing roads is less disturbing than interfering with the habit of drinking





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or of driving cars with defective brakes. As most of us would not agree with such an assessment, we would reject (d) and (e) as causes of the accident readily.

Now it is one thing to arithmetically relate (as Enke does) population growth with per capita incomes, saving rates and economic growth; but it is another to suggest that high population growth is a cause of poor economic growth. For to suggest that it is a cause, it implies that it can be manipulated; to air it prominently as a cause, is to believe that it is one of the easiest things to manipulate as compared to other possible factors of poor growth, e.g. the growing consumption of the urban rich in the country, or food prices; and that control of growth of population can be achieved with a less disturbing kind or interference than control of other factors. But how valid are these assumptions?

## II

### Feasibility of Population Control

The conventional way of looking at the costs of controlling population growth is to try to estimate what would be direct medical cost of preventing a birth plus what would be the incentive payments required on average and at the margin.

A recent study for India, for example, estimates that the marginal cost, after a level of 7 million prevented births, might be around Rs 380 to Rs 458 (J. K. Satia and C. Rangarajan, 1974). (See Table 1. It is doubtful, however, what status should be given to such a statistic. For one thing, the wide fluctuations in the year-to-year estimates of the cost of a prevented birth suggest that there is not much of a dependable cost function. However, even if one believes that the rising number of prevented births is in some sense related to the growing amount of family planning expenditure, it is doubtful whether one could say that the relationship would hold in future.

Indeed, a study by D. Banerji comes to the conclusion that in recent years there has been no correspondence between the demand for family planning services and the rate of expansion in it (D. Banerji, 1974). He argues that the tendency in the recent period is for the acceptors to fall off; the upsurge in 1971-72 and 1972-73, the author thought, was largely a result of massive drives, which it is thought, cannot be repeated each year with equal success. During the first half of the 1973-74 the number of sterilisations fell off by as much 35 per cent compared to the cor-

responding period in the previous year.

Banerji further argues that the number of prevented births associated with the acceptors of various types of contraception has been overestimated. To quote him :

There are serious doubts about the reliability and the accuracy of the very scanty and the very sketchy data on the mass camps which are collected by government agencies. Even within these very serious limitations, the department of family planning's own data on the acceptors of Mass Vasectomy Camps provide a very disturbing profile : the government records indicate that the average number of living children (associated with each acceptor) was 4.1, 3.92 and 4.4 and the recorded age of the wife was below 30 years in 43.2, 24.2 and 6.4 per cent respectively in the Ernakulam, in the Madurai and Ramanathapuram and in the Gorakhpur vasectomy camps. In the Bulandshahr camp, the average recorded age of the wife was 35.2 and in the Madurai and the Ramanathapuram camps the average recorded age of the last living child was 8.2 years. More careful and independent studies ... indicate that in over 60 per cent of the cases, the performance of vasectomy was of little demographic significance. (Banerji, 1974.)

Banerji also argues that only a "small fraction of the capacity of institutions providing family planning services — very often not even 10 per cent of the capacity — is being utilised".

This impression of non-effective expansion in family planning services in recent in India is consistent with the fact that the birth rate in recent years has hardly shown any fall. From 39.0 per thousand in 1968, it moved to 38.8 in 1969 to 1971. It can be argued, therefore, that the expansion in family planning services has not been of much consequence in recent years.

It may be maintained, however, that the costs per birth prevented still fall within the margin of benefit per prevented birth, and therefore, one should increase the expenditure on family planning still further — to the point of equality between marginal cost and marginal benefit. Such an argument, however, is valid only if one can postulate that the number of acceptors can be said to be a function of the expenditure on family planning. This may not be so. It is possible to argue that the number of potential acceptors is not determined by the expenditure on family planning, but by other factors which motivate people to adopt birth control. An extreme way of putting it is to say that, irrespective of the expenditure on family planning, there are always a number of people in the society who are motivated to adopt

birth control; what the family planning service does is that it provides contraceptive materials and services to these people in ways which are cheaper and cause less stigma. If this is the view one takes then one cannot speak of equating marginal costs with marginal benefits.

If the number of acceptors is not a function of expenditure on family planning can we focus on some other factors which can be said to determine the fertility level? In what follows, I argue that there are two aspects which one should pay attention to in this context, viz, the infant mortality rate and the nature of the economic class in which the family finds itself.

## III

### Infant Mortality and Fertility<sup>6</sup>

That a family might have to give birth to a large number of children when mortality rates are high is a familiar argument. It is also, therefore, intuitively seen that birth rates might fall when mortality rates decline. What is not often appreciated, however, is that birth rates might fall more than proportionately to death rates, thus bringing down the growth rate of population itself. Under what conditions this can happen is demonstrated below.

Suppose that :

- Every couple wish that at least one child survives them and that they control their fertility behaviour such that they have a minimum number of children to ensure that at least one child survives them.
- A couple feel confident that at least one child will survive them if the probability of death of all the children they have is not greater than ten per cent.

In short the aim of a couple is to have the minimum of babies necessary to ensure that at least one child survives them with ninety per cent confidence.

Given these assumptions, how would the fertility rate behave as mortality rates fall? In Table 3, we show what would be the required number of births per woman (x) and the average number of survivals (x.s) per woman, as survival rates (s) improve, under the above assumptions.

From Table 3 it can be seen that when mortality rate (1-s) is as high as 70 per cent, a woman has to give birth to at least seven children to ensure that the probability of all her children dying during infancy should be less than ten per cent; this number diminishes as mortality rates fall, so that if the mortality rate is only ten per cent, she needs to give



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TABLE 1: COST PERFORMANCE OF THE FAMILY PLANNING PROGRAMME IN INDIA

Year	Expenditure at 1961 Prices (million Rs)	Acceptors of			Births Averted (millions)	Cost Per Birth Averted (Rs)
		Sterilisa- tions	IUCD (millions)	Conventional Contraception		
1961	9.3	0.80	0	0.16	0.160	61
1962	13.7	0.16	0	0.24	0.308	44
1963	26.5	0.20	0	0.25	0.378	70
1964	18.8	0.22	0	0.27	0.415	45
1965	51.7	0.32	0	0.42	0.607	75
1966	88.0	0.70	0.68	0.72	1.760	50
1967	86.0	0.90	0.92	0.50	2.250	38
1968	158.0	1.84	0.80	0.40	3.746	42
1969	230.0	1.74	0.44	1.00	3.416	67
1970	300.0	1.48	0.48	1.52	3.08	97

Notes: Sterilisations = 1.7 prevented births over 10 years; IUCD = 0.7 births prevented over 5 years; Conventional contraception = 0.15 births prevented per year.

Sources: J K Satia and C Rangarajan (1974).

TABLE 2: PROGRESS OF CONTRACEPTION IN INDIA

Period	Number of Sterilisations (000)	Number of IUCD Insertions (000)	Number of Con- ventional Contra- ceptives Distribu- ted in Equivalent Nirodhs (000,000)
1958 to March 1965	983	—	104
1965-66	543	813	94
1966-67	887	910	66
1967-68	1840	669	74
1968-69	1650	473	140
1969-70	1422	459	111
1970-71	1319	471	151
1971-72	2234	473	161
1972-73	3039	342	161

Source: D Banerji (1974).

birth only to one child. The interesting thing is that the average survivals per family ( $g$ ) also decline in this process, suggesting that not only the birth rate, but the growth rate of population also would fall.

At very high mortality rates, the required number of births might exceed the fecund limit of a woman, so that in certain ranges of mortality a fall in mortality rate might not be immediately followed by a reduction in births.

Given that  $x \leq x^*$ , where  $x^*$  is the fecund limit, the behaviour of  $x$  and  $g$  as  $s$  increases is shown in Diagram 1. Diagram 1 shows how the birth rate  $x$  and the growth rate of population  $g$  would behave as survival rates improve, assuming that  $x$  can be a continuous number.

What emerges is that: (a) as survival rates improve birth rates might remain flat and growth rates rise upto a point; after that birth rates fall more than proportionately and growth rates decline. The initial unresponsiveness of birth rates to improvements in mortality is due to the fact that at very low survi-

val rates the minimum number of children required to ensure the survival of at least one child with some confidence may be so large that it might exceed either the fecund capacity of the mother or the economic capacity of the family to support so many children to start with. (b) Curiously, the number of children a couple might end up with on average ( $x.s$ ) might be larger than the desired number which in our example is assumed to be one. That is to say, a couple in an attempt to hedge against the risk of losing all the children have so many extra babies that in general the actual number of surviving children exceed the desired number of children. Such a discrepancy is larger, the smaller the survival rate confronting an individual couple.

I have debated the realism of the assumptions underlying such a result elsewhere (S K Rao, 1974). It is concluded that on balance there is evidence in favour of the assumptions made in the model. Such a conclusion is further strengthened by a recent study of fertility behaviour in Kerala (Gopinathan

Nair, 1974). Nair argues that the fertility rate in Kerala began to decline in the early sixties, before the intensification of the family planning programme; then he advances "the proposition that the fall in the birth rate in the early sixties could have been the consequence of the decline in infant and child mortality rates during the later fifties following extension of primary health measures over a period of time".

#### IV

#### The Desired Family Size

In discussing the relevance of mortality to fertility behaviour, we started off by postulating that there is a desired family size. In the arithmetical example worked out in Table 3, we assumed that the desired number of children is one. What the desired number of children is, however, could vary from group to group. We argue that this tends to be highest in the case of groups whose source of income is family employment, next come the wage earners, then the professionals, and then property owners, in that order. We first outline our hypothesis, then we examine whether the empirical evidence is consistent with such a hypothesis.

In considering how the class position affects fertility behaviour we distinguish two costs, and three motives as to why people want children. We examine these costs and motives in the context of four economic groups or classes. The classes are distinguished in two respects; (a) their income level, which determines the current level of living; and (b) their ownership of property which affects their access to employment and income in future. The four economic groups we distinguish are:

- I *Workers*: consisting of landless labourers in rural areas, coolies, and industrial manual workers in urban areas. This class is characterised by dependence on others for employment and a low income level;
- II *Peasants and petit bourgeoisie*: small peasants who cultivate land mostly with family labour; petty traders, carpenters, weavers, and generally people who live by house

TABLE 3: AN ARITHMETICAL ILLUSTRATION OF THE RELATIONSHIP BETWEEN FERTILITY AND MORTALITY

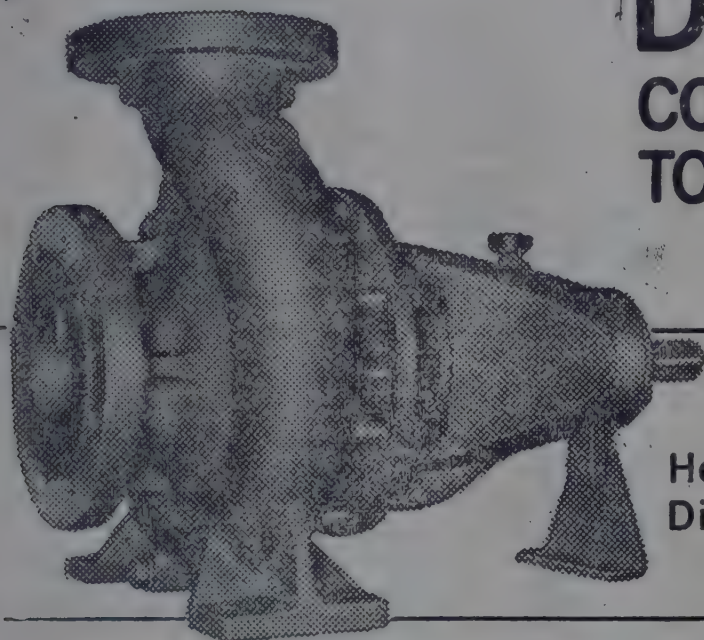
(such that $(1-s)x < .1$ )		
$1-s$	$x$	$x.s=g$
.70	7	2.1
.50	4	2.0
.30	2	1.4
.10	1	0.9



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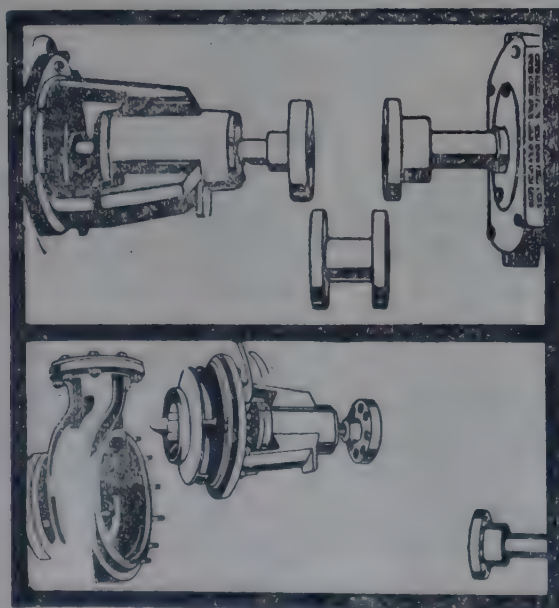
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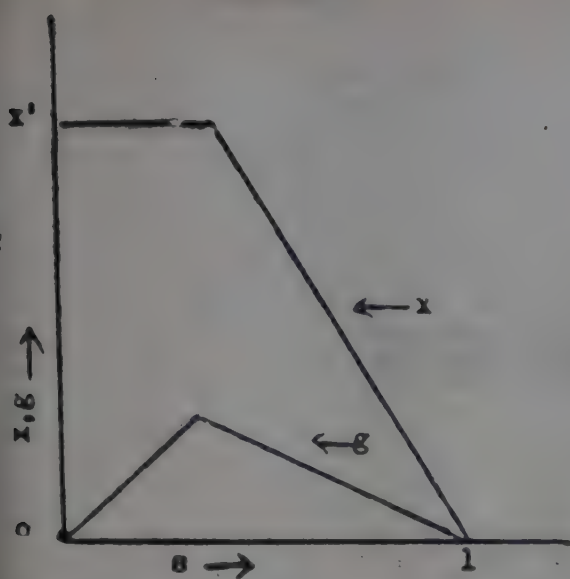
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DIAGRAM 1



$x$  = number of births per woman  
 $x'$  = the fecund limit  
 $s$  = survival rate  
 $g = x.s$

hold industry. This class is characterised by self-employment and usually enjoy a higher income level than workers (i.e., Class I).

III *Capitalist farmers, industrialists, big traders, etc.*: This class is characterised by the fact that its members are employers and live by ownership of property. We may call this the capitalist class.

IV *Professional Classes*: These are people who enjoy fairly high income, higher than Classes I and II; they, however, derive their income by doing jobs which require skills through education, etc. It thus includes civil servants, skilled personnel like doctors, engineers, etc.

Let us now discuss the costs and motives of having children in the context of each of these classes.

The costs of bringing up children consists of (a) the direct costs of feeding, and (b) the indirect costs of forgoing employment opportunities by women. To discuss indirect costs first: these depend upon whether women normally take up employment or not. It is a fair generalisation that women in Class I (Workers) take up employment because family income gets considerably boosted that way. At the small peasant level (Class II), women do more than household work, but this is usually limited to work on the family farm. In Class III (the capitalist class) it is a safe assumption that women do not work. In Class IV this trend is reversed; women, though not so very often as in the working class, do tend to take up work. This is partly a means of boosting family income. Thus the indirect costs can be said to fall as we move from workers to capitalists; but they rise again as we move from capitalists to professional groups.

To facilitate the discussion, we shall refer to relative costs, i.e., costs considered as a proportion of income. The indirect costs in the relative sense also move in the pattern depicted above; they are high for Class I, fall as we move to Class II, are probably nil for Class III, but rise slightly as we move to Class IV. The direct costs of feeding, clothing and educating children, as a proportion of income, fall as we move from workers to peasants to capitalists; but they rise as we move from capitalists to the professional classes. Thus we postulate that total relative costs fall and are lowest in Class III; they rise slightly between Class III and IV.

The strength of the motives for having children vary from Class to Class; let us consider the major motives.<sup>7</sup>

- Children make the home happy.
- Children are a source of future income.
- Children are an insurance against old age.

Motive (a) is a universal motive. So we shall discuss motives (b) and (c).

#### CHILDREN AS A SOURCE OF INCOME

##### Class I

This should be a fairly strong motive in this class, since income levels are low and any addition to income is welcome. However, the expected income associated with children is likely to be small for many reasons. First, since there is no full employment, one cannot hope that children will be employed throughout the year. This is especially so since children would lose to adults in competition for jobs; therefore, children can be employed only during the peak pe-

riods of employment. In the case of urban workers, the picture may be even more bleak; second, whether children give up their income to parents is likely to be influenced partly by employment conditions. Sometimes children, who are employed in household chores, are fed by the employer, and they have no net income beyond that. Moreover, the cultural practices tend to be such that children, as soon as they grow into adulthood, set up separate families, denying any income to their parents, due to the pressure of poverty. All in all, it is fair to say that the expected addition to family income associated with children in this class would be low.

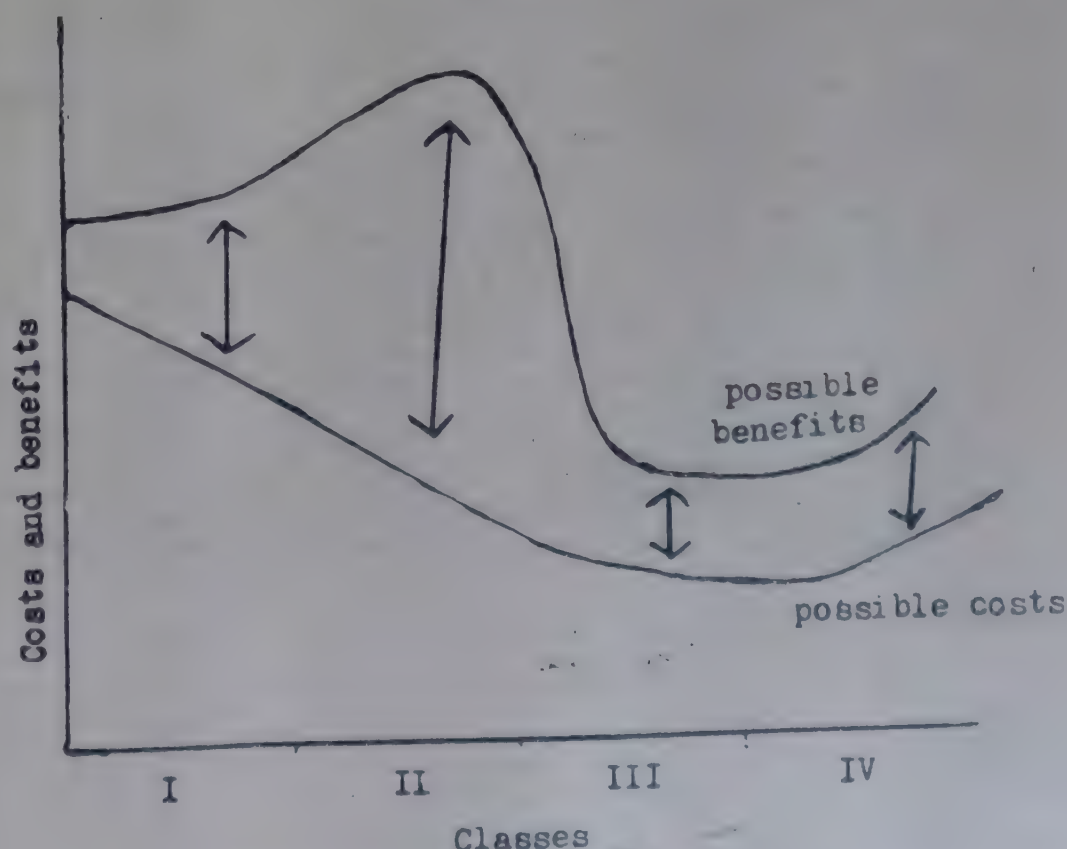
##### Class II

This motive is likely to be much stronger in this class than in Class I. While, on the one hand, pressure of poverty and hence the importance of children as a source of income is less acute, the chances of employment are greater in the family farm or household industry. Further, because of family dependence based on property, children are likely to stay on in a joint household much longer, through part of adulthood. Moreover, because children are fed slightly better in this class, they tend to be more productive. For these reasons, the income stream associated with a child in this class would be higher than in Class I.

##### Class III

This motive is likely to be very weak in this class — partly because the income level is quite high, and partly because income is not earned by work

DIAGRAM 2





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TABLE 4: FERTILITY RATE BY LEVEL OF LIVING IN RURAL INDIA

Zone	Index of Level of Living	Marital Fertility Rate
EAST	0.6	.214
	3.3	.220
	7.6	.196
	12.3	.170
	23.0	.237
	10.7	.210
CENTRAL	1.7	.172
	9.7	.254
	18.7	.257
	32.8	.210
	11.9	.217
NORTH	1.6	.162
	7.5	.226
	12.2	.285
	20.1	.233
	34.1	.184
SOUTH	12.9	.204
	1.6	.162
	7.5	.171
	12.6	.201
	19.6	.154
	32.0	.166
WEST	13.4	.169
	5.0	.163
	12.3	.222
	17.5	.198
	30.0	.186
NORTH WEST	16.7	.185
	5.7	.178
	20.1	.288
	40.4	.250
	22.0	.230

Source: Gupta and Malakar (1963).

in this class. Children, however, would be desired both to see the continuance of the family, and to fill up the key positions in managing the family property; against this, there would be the fear of sub-division of property, upon which the social status of the family might depend. All in all, the number of children desired would be rather small compared to Classes I and II.

#### Class IV

In this class, the motive is likely to be weak, though not as weak as in the capitalist class. Professional employment demands mobility of people, and hence one cannot expect joint families. Moreover, as the income level is fairly high, the desire to make additional income through children is likely to be weak.

To sum up: we expect the motive — children as a source of income — to be strongest among peasants and petty bourgeoisie. This motive is likely to be weaker among workers and weakest among capitalists and professional groups.

#### CHILDREN AS INSURANCE AGAINST OLD AGE

The desire for such an insurance would be strongest among workers; it is precisely in this class that they can't greatly depend on any one particular child, since the income earned is small. They may seek safety in numbers — if there are many children, parents can depend on one child or another. This motive becomes weaker, as the property status increases. Property is a safe enough insurance against old age! In peasant families the insurance motive is likely to be much stronger than in capitalist groups. This motive might also be strong among professional groups — since they do not always live by property.

We should, at this stage, add that the preference for sons would be stronger than for daughters. In motives (b) and (c) it is a son who can fulfill the relevant expectations, since it is a male who can take up employment easily. Such a preference would imply that some families might continue having children, if they have not yet succeeded in having a son. This would tend to inflate the birth rate particularly in Classes I and II, where motives (b) and (c) are the strongest. What would be the net effect of these motives as we move from Class to Class?

The upshot of the above discussion may be captured in a visual representation of the motivation for having and not having children (see Diagram 2). On balance, the net motivation for having children may be strongest in Class II (peasants and self-employed people) and weakest in Class III (capitalist industrialists and landlords) for the reasons discussed; and the desire for having children may be stronger in Class I than in Class III or Class IV.

Is the empirical evidence consistent with the above ideas? A most widely-held belief among demographers seems to be that there are no systematic group differences in fertility (Myrdal, 1968, p 1446). It is possible to argue, however, that they have arrived at such a conclusion in spite of some evidence to the contrary, because first, the basis of classifying the population was not along the lines discussed above, but following such criteria as literacy, religion, caste, urbanisation, etc, which as such may not be the significant variables.<sup>8</sup> Second, conclusions were often drawn on the basis of testing for *unidirectional* relationships (say, that as income goes up, fertility is supposed either to go up or go down systematically), whereas there is no reason why one should not allow for, say, a 'U'

shaped relationship.

There are, however, a few studies which do indicate systematic differences in fertility, contrary to the usual belief. Gupta and Malakar (1963) in a study found that there is a systematic relationship in rural areas between the level of living and the fertility rate. Defining the index of level of living as the ratio of expenditure on luxury goods in monthly expenditure, which co-varies strongly with infant mortality, they found that in all the zones in India a particular pattern in fertility is repeated — viz, that as the index of level of living rose, fertility rose at first and then it declined rather sharply followed by a slight upward movement at the tail-end (see Table 4). If one interprets the rise in the level of living to mean that one is also moving from our Class I to Classes II, III and IV then their findings are in perfect harmony with our expectations.

A D Sharma (1969) also seems to have found a similar pattern for Allahabad city. He observes that "a study undertaken in Allahabad shows that the total fertility rate in the sample increases at low level of incomes and reaches a maximum in the group having incomes between 101 and 200 rupees. As income rises further, fertility declines. Fertility is higher among agricultural occupations and lower among the professions" (p 429).

In a critique of the Khanna study,<sup>9</sup> Mamdani (1972) also argues that wage-earners and small farmers in the Khanna area wanted larger families as children are valued as sources of labour power and as an insurance against old age. Unfortunately, Mamdani does not differentiate the wage-labouring class from the small farmer class in making these observations, but it does not reduce the value of his evidence.

#### V

#### Concluding Remarks

There is thus some evidence in favour of the argument that it is not so much socio-cultural factors like caste, religion, literacy, urbanisation, etc, but objective socio-economic circumstances like the chances of child survival, the nature of the source of livelihood, etc, which are the factors determining fertility. Therefore, expenditure on family planning which tries to work purely through the former set of variables cannot be expected to influence fertility behaviour significantly. All that it can hope for, at best, is to help people who are already motivated to limit family size to switch over from conventional and cumbersome



methods of contraception to the modern methods. That is, indeed, what seems to have happened in the Khanna area (see Wyon and Gordon 1971). No doubt, there may be some scope for fertility reductions through improvements in literacy and in information on contraception, but the scope for this is found to be marginal.

The burden of our argument is that the number of births a couple have may not be an arbitrary affair, nor really determined by fecundity level in the absence of knowledge of birth control practices, but may be a variable which is influenced by strong motivations on the part of the couples in favour of having or not having children.<sup>10</sup> These motivations, we believe, are rooted in the desire to ensure a minimum number of survivals in the face of heavy mortality risks and in the socio-economic circumstances which make couples view children as possible sources of labour or old age security.<sup>11</sup>

If this is so, then the extent to which a family planning programme can succeed in bringing down the birth rate will be limited. There is no doubt that in the limited phase it might meet with some success in bringing down the birth rate; for the provision of modern, reliable, less cumbersome methods of contraception might not only lead to substitution of these in place of the old methods, but might lead to a greater use of contraception, as there may be couples who end up by having larger number of births than they wish for simply because they do not have effective access to the practices of contraception. As the programme expands, however, it might meet with less and less success as it thus comes up against the barrier of socio-economic compulsions for having children. It is then doubtful whether there is much point in saying that population growth is a cause of poor economic growth.

### Notes

[I am grateful to D Banerji, I Quadeer and A Bagchi for helpful discussions.]

- 1 See Ministry of Finance (1974) Table 1.1.
- 2 See Planning Commission (1971) p 36.
- 3 See P K Bardhan (1973).
- 4 Enke (1974). He purportedly does try to carry out a disaggregation analysis, but the disaggregation he attempts does not meet our case.
- 5 This part of the argument is repeated from an earlier note of mine (S K Rao, 1973).
- 6 This is a simpler exposition of the model outlined in S K Rao (1974).
- 7 See "Mysore Population Study", UN (1961) on various motives quoted

by parents for having children; also Mamdani (1972).

- 8 In this context see UN (1967) and the International Union for the Scientific Study of the Population (1969).
- 9 See J B Wyon and J E Gordon (1971). It reports the findings of an attempt to promote birth control in the Khanna area in Punjab.
- 10 See in this context, Ronald Freedman (1968).
- 11 This is substantiated to some extent in a recent study of the World Bank. See IBRD (1974). The burden of their argument is that the birth rate is neither entirely arbitrary nor entirely determined by socio-economic factors but is partly open to manipulation.

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### Baroda Rayon

BARODA RAYON has turned out disappointing results for 1975, with a drop in gross profit from Rs 3.96 crores to Rs 1.74 crores despite advance in sales from Rs 14.31 crores to Rs 19.77 crores. This outcome is attributed to a steep increase in the cost of production. The company's rayon plant operated at full capacity and maintained production at the previous year's level. Production of nylon yarn was stepped up from 821 tonnes to 1,551 tonnes. Prices of rayon yarn were depressed almost throughout the year and continue to remain unremunerative. Excise duty on yarn was increased by nearly 40 per cent in the 1975 budget. The voluntary agreement between spinners of rayon yarn and weavers' associations has been more or less held in abeyance, as market prices have remained below the prices agreed for supply of yarn to weavers. The company has to deliver upto 25 per cent of its rayon yarn production for export purposes at rates "substantially lower than its cost of production". The 1976 budget has given some relief

by reducing the excise duty on caprolactum from 50 per cent to 25 per cent *ad valorem*. No excise duty reduction has, however, been given on nylon yarn although prices are claimed to be unremunerative. The excise duty rate on rayon yarn have been reduced by about 14 per cent on an average on deniers.

The company has received an industrial licence to increase the capacity of the nylon plant from 1,800 tonnes to 2,100 tonnes per annum. It has been allowed to manufacture polyester filament yarn upto 360 tonnes with this overall licensed capacity. Production of polyester filament yarn from polyester chips commenced in April last. The company proposes to put up a poly-condensation plant shortly for manufacture of polyester chips directly from DMT. The company has got industrial licence for putting up a plant for manufacture of 2,000 tonnes nylon tyre cord. The company has also been permitted to convert 1,000 tonnes of tyre yarn into tyre fabrics.



# Population Policy and Redistribution of Income

C Rangarajan

J K Satia

*Given the present level and pattern of distribution of income and the occupational structure of the economy, there may not be sufficient economic motivation for families below a certain consumption level to limit their size to the extent necessary for bringing about the desired reduction in the overall fertility levels. A congruence of economic motivation at the national level and at the family level is, therefore, necessary.*

*How does the need for bringing about such a congruence affect national policy? First, it is not sufficient for the economy to grow at a faster rate. Rather, a significant impact on fertility can be made only if a more equitable distribution of income is achieved. Second, a shift towards an appropriate technology is needed. As the level of income increases, a shift to less labour-intensive technology will be necessary so that families find a sufficient economic rationale to limit their size.*

*A population policy for achieving the long-term objectives, therefore, should also be directed towards redistribution of income and proper technological choices.*

THE impact of reduced population growth on economic development, particularly that of the developing countries, has long been recognised. It is also now widely accepted that development affects population growth. The recently announced national policy on population recognises the interaction between development and population growth. But, it adds

Nonetheless it is clear that simply to wait for education and economic development to bring about a drop in fertility is not a practical solution. The very increase in population makes economic development slow and more difficult of achievement. The time factor is so pressing, and the population growth so formidable, that we have to get out of the vicious circle through a direct assault upon this problem as a national commitment.

The total number of couples in the reproductive age can be divided into two groups — those who desire no more children, and those who desire more. Almost all surveys reveal that approximately 50 per cent of the eligible couples do not desire any additional children. The largest number of such couples have three or more children. That is, the desired family size is somewhere between three and four on an average. Most of the elements of the current policy and programmes are directed towards the segment of population that has reached its desired family-size. Other measures beyond family planning such as raising the age at marriage and increasing the female literacy are mainly directed towards creating favourable attitudes towards family planning.

Acceptance by 50 per cent of the eligible couples will result in a reduction of birth rate to approximately 25 per thousand and a population growth rate of 1.2 per cent. This may indeed

be achievable by the present policy and programmes. Containing the population growth to a much small rate would require that a larger number of couples accept family planning. This, therefore, implies that the desired family size would have to be affected. Measures would have to be taken which would lead to a reduction in the desire for children. We, therefore, need to examine the motivation and the factors that affect the desire for children and influence these through suitable policies and programmes.

In this paper, we discuss the economic motivations for reducing fertility at the national and family levels. It is argued that a congruence between the motivations at the national and family levels is needed and can only be achieved through redistribution of income and proper choice of technology.

## BENEFITS OF REDUCED POPULATION GROWTH AT NATIONAL LEVEL

At the national level, the benefits of reduced population growth in a country like ours arise mainly from the reduction in consumption and the increase in savings resulting from such a slower growth. The argument is first, that when the population does not grow as rapidly, the direct consumption also does not increase as rapidly, and, therefore, a higher percentage of total income becomes available for investment. Secondly, with a reduced population growth, the welfare and administrative expenses of the state also do not increase as much. The combined savings due to these two factors will make additional resources available for investment. Therefore, the national income in subsequent years will be higher. It is implicitly assumed that investment rather than labour is the limiting factor in in-

creasing the national income and a surplus of labour will exist even after some reduction in the growth of population. In the subsequent years two kinds of effects are experienced. One is the higher investment available in a particular year due to the operation of the above factors and the other the effect of the higher investments made in the previous years resulting in an increase in national income and consumption. These benefits resulting from fertility decline can be converted into present value measures by suitable discounting procedure. This can be referred to as aggregate income benefits.

The second type of benefits arise because there are fewer consumers sharing the available aggregate income. This means that per capita income would be higher than what it would have been in the absence of fertility decline. The difference in per capita income multiplied by population size would then give an estimate of per capita income benefits. Once again this can be discounted for different levels of fertility reduction and the present value of the per capita income benefits can be estimated. The sum total of aggregate income benefits and per capita income benefits can be taken as the total benefits of fertility decline.<sup>1</sup>

Tables 1 and 2 summarise some of the results of a study done by the present authors to estimate the benefits of reduced population growth.<sup>2</sup> The estimated differential in national income between the present rate of fertility and very low fertility projection works out to only about 4 per cent. However, the difference in per capita income indices due to such fertility decline works out to 30 per cent by 1991. Therefore, significant benefits arise due to fewer consumers sharing the available total in-



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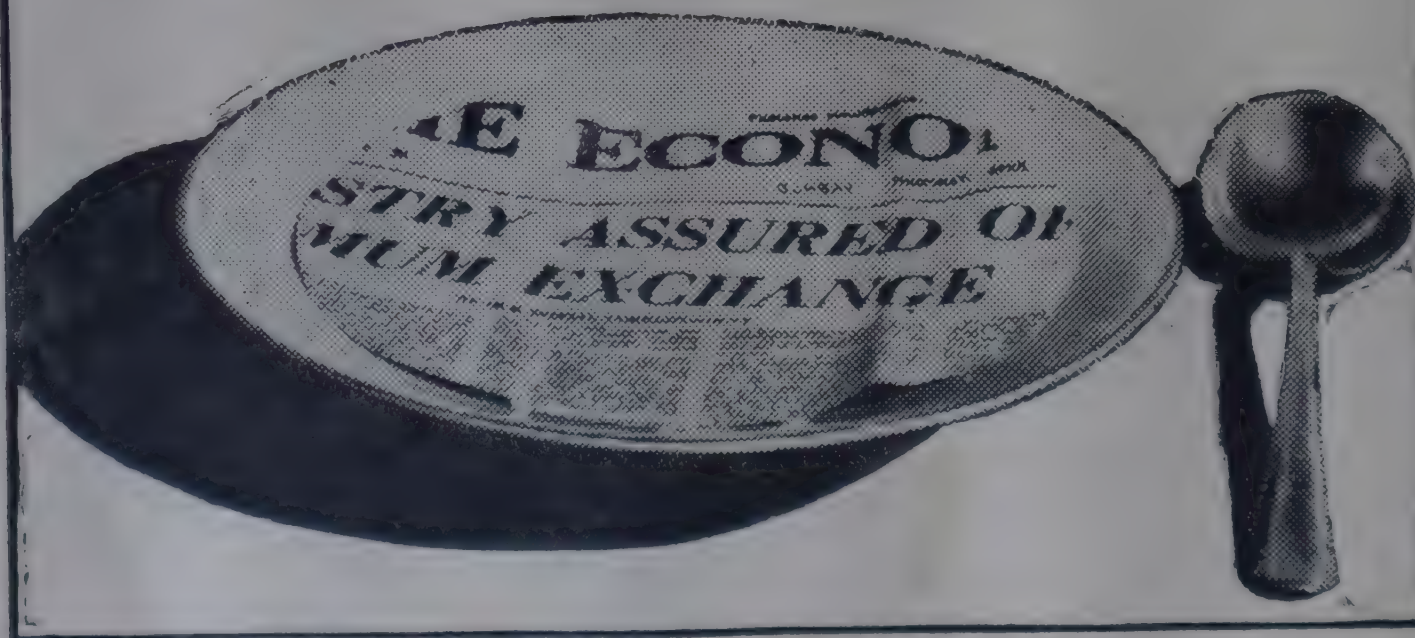
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come and a consequent increase in per capita income.

When these benefits are discounted at 10 per cent rate for a 30 year horizon, the aggregate income and per capita income benefits per birth averted of a large decline in fertility work out to Rs 470 and Rs 2,420 respectively. Therefore, per capita income benefits are 80 per cent of the total benefits due to a decline in fertility.

Since an important component of the benefits is felt through the increase in per capita income, a relevant question is: Are these benefits felt by every family? The present pattern of income distribution shows a large difference between the various segments of the population. If the increase in income is not accompanied by any change in the pattern of distribution, all income groups would feel the same percentage increase. For families with very low levels of income the benefits may not amount to much. If, on the other hand, the increases in income are equitably distributed, families with a low level of consumption would experience a significant rise in income. If the increased income accrues only to the poorest segment of the society, the benefits of fertility decline will be felt even more strongly by this segment. Therefore, it is not the increase in national income but the pattern of distribution that is critical.

#### BENEFITS-COSTS AT FAMILY LEVEL

It has been established that economic rationality, although not the only factor, plays a significant role in an individual family's decision regarding its family size.<sup>3</sup> The economic benefits of having an additional child to a family are in the form of expected services, income, and security provided to it by the additional child. The costs are in the form of a higher stream of consumption required by the child. This stream of consumption also includes cost of education and health care, a fraction of which would be provided by the state. Therefore, all the costs of the needed additional consumption may not be felt by the family. However, the quantum of marginal benefits will decline and marginal costs will increase with an increase in the family size for all income levels.

The benefits of an additional child will depend upon the income level of the family. The higher the income level of the family, the less will be the need for social security and, therefore, the less will be the utility of the benefits of additional children. Similarly the amount of consumption of the additional children will also be higher at a higher

TABLE 1: NATIONAL AND PER CAPITA INCOME PROJECTIONS AT 1961 PRICES FOR DIFFERENT FERTILITY DECLINES

Fertility Decline Path	National Income Indices			Per Capita Income Indices		
	1971	1981	1991	1971	1981	1991
Present rate	100	155	247	100	120	147
Medium decline in fertility	100	155	252	100	126	172
Large decline in fertility	100	156	257	100	130	192

TABLE 2: BENEFITS PER BIRTH AVERTED AT TEN PER CENT DISCOUNT RATE AT 1961 PRICES

Fertility Decline	Aggregate Benefits			Per Capita Benefits		
	1981	1991	2001	1981	1991	2001
Present level	70	290	600	710	1660	2700
Medium decline in fertility	54	210	485	600	1400	2430
Large decline in fertility	50	200	470	570	1370	2420

income level of the family. Parents at low levels of income do not expect to incur large additional costs for raising their children but instead expect children to work on the farm, and in the home, and thus contribute to the income of the family.

These arguments would imply that the family sizes preferred by the low income families will be larger than those preferred by families having relatively higher income levels.<sup>4</sup> Indeed in the Indian situation, for a significant segment of the population the benefits of a large family will exceed the costs.<sup>5</sup> A study by Mahmood Mamdani reveals that the additional value of labour provided by children in the families dependent upon agriculture not only exceeds the costs of raising the children but also the cost of such labour provided by outsiders.<sup>6</sup> He quotes a typical reaction of the villager:

You think I am poor because I have too many children (he laughs). If I did not have my sons I would not have half the prosperity I had and God knows what would happen to me and their mother when we are too old to work and earn.

#### RELATIONSHIP BETWEEN BENEFITS-COSTS AT NATIONAL AND FAMILY LEVEL

Earlier we have discussed the nature of benefits and costs of reduced family level and at the national level. If individual families had the same benefits-costs relationship as that at the national level, then there will be no conflict between the size of population determined at the national level and the one that would result from an aggregation of individual family decisions. However,

this may not be so. It could be argued that in India, if individual families opt for a size that optimises their net benefits, the aggregate that would result would be higher than that determined by national level considerations.

There are several reasons for the lack of congruence between national and family level benefits-costs relationship. First, the per capita benefits of reduced fertility may not be experienced by the poorer families. This is because income at present is very inequitably distributed and may continue to remain so. Redistribution of income benefits would result in a decline in fertility as the per capita benefits would now accrue to the individual families. That a decline will occur may be accepted by many, but the question is: Will such a decline be significant? Until now, there have been few, if any, quantitative studies explicitly exploring the relationship between income distribution and fertility levels. A recent study exploring the relationship of the size and distribution of income to fertility found:

The results of the regression analysis show a strong and stable relationship between distribution of income and fertility. The coefficient of the measure of income distribution has the expected sign in each equation, is statistically highly significant, and contributes substantially to the explanations of variations of fertility.... In the linear model it is found that each additional percentage point of real income received by the poorest 40 per cent reduces the fertility index by 2.9 points... These co-efficients of the equation suggest that fertility decline is much more sensitive to changes in income at the bottom end of the distribution.



Translating these findings to India, a distribution of one per cent of GNP to the poorest 40 per cent of the population would be predicted to result in a decline in birth rate of 0.6 per thousand. This is an important conclusion because our objective has been that of reducing the birth rate by one per thousand per year.

The second reason for the lack of congruence arises because of the difference in the value of labour as assigned by the nation and the family. While every family views an additional child as a productive agent, the nation as a whole does not view it in the same light. The value of the increased labour provided by a higher population may be compensated by a corresponding decline in the average productivity. To put it in the other words, even though marginal productivity of labour is zero, the marginal product of a labourer is positive. Unless the productivity of labour increases substantially, individual families will feel the need for having a large family.

Finally, the lack of congruence arises because a large fraction of welfare costs is met by the state and not by the family. This can be resolved in the present context by the use of selective economic incentives and disincentives for practising family planning. The present family planning programme uses incentives to motivate the acceptance of family planning to some extent.

#### POLICY IMPLICATIONS

Given the present pattern of distribution and level of income and the occupational structure of the economy, there may not be sufficient economic motivation for families below a certain consumption level to limit their size to the extent necessary for bringing about the desired reduction in the overall fertility levels. A congruence of economic and the family level is, therefore, necessary. Indeed, as pointed out earlier, there is some evidence that action taken to reduce the lack of congruence between benefits-costs of family size at the national and family levels will have a significant impact on the fertility levels.

How does the need for bringing about such a congruence affect national policy? First, it is not sufficient for the economy to grow at a faster rate. Rather, a significant impact on fertility can be had only if a more equitable distribution of income is achieved.

Second, a shift towards an appropriate technology is needed. Given the occupa-

tional structure of the economy, labour intensive technology would be most appropriate for ensuring maximum employment. But this would conflict with the goals of achieving fertility reduction. As the level of income increases, a shift to less labour intensive technology will be necessary so that families find a sufficient economic rationale to limit their size. Mahmood Mamdani, based upon a study of Khanna villages, says:

We have seen that the agricultural classes live in a society with a low level of technology, where survival as well as competition is conducted primarily on the basis of numbers; labour is the most important factor. For them, family planning means voluntarily reducing the family labour force. This would mean courting economic disaster and would, therefore, be extremely irrational. Not until the level of technology used by the majority of the villagers in their work is significantly raised, can the attitude toward family planning change.

A population policy for achieving the long term objectives, therefore, should also be directed towards the redistribution of income and proper technological choices. It is thus closely interlinked with national economic policy.

#### Notes

- 1 Perhaps a simple numerical example will help to explain the different benefits. Let us suppose that the population of a country when no effort is made to restrict its growth is 100 and its income 900 units. Then the per capita income is 9. On the other hand, let us

assume that the population would have been 90 and income 1,000 if attempts had been made to reduce the population growth rate. Then, in our terminology, the aggregate income benefit between the two rates of population growth would be 100. The per capita income benefit would be  $(900/90 - 900/100 \times 90) = 90$ . Thus the total benefit will be  $100 + 90 = 190$ .

To estimate such benefits for India one would have to estimate the resultant income paths for various fertility declines through the use of an economic model.

- 2 J K Satia and C Rangarajan, "Optimal Targets for Family Planning Programme", *Economic and Political Weekly*, IX, 15, April 13, 1974.
- 3 J L Simon, "The Effects of Income on Fertility", University of Carolina: Carolina Population Centre, 1974, Monograph 19.
- 4 This fact is well recognised by researchers. Unfortunately, however, studies fail to reveal any significant causal effect of income on family size. Further research on estimating benefits and costs of family sizes is needed.
- 5 Of course, the families may tend to perceive the benefits higher and costs lower than their real values due to social and psychological factors. To the extent such perceptions differ from economic realities, the desired family size will tend to be higher than what economic rationale may dictate.
- 6 Mahmood Mamdani, "The Myth of Population Control: Family, Caste, and Class in an Indian Village", New York: Monthly Review Press, 1974.
- 7 Population Policies and Economic Development — A World Bank Staff Report", Baltimore, Johns Hopkins University Press, pp 146-47.

#### Polyolefins Industries

POLYOLEFINS Industries Limited (PIL) has been permitted by government to participate in a joint venture project in Malaysia for manufacture of high density polyethylene pipes and pipe fittings. The company has been exporting pipes to Malaysia and has been installing them in various tin mines there for some time past. The company has also laid an under-water pipeline for affluent disposal for Zuari Agro Chemicals at Goa, and takes pride that this was the first venture of its kind in South-East Asia. During 1975, PIL produced 22,145 tonnes of high-density polyethylene — as against 26,034 tonnes last year and installed capacity of 20,000 tonnes. Production of processed polyethylene products too was lower at 1,127 tonnes — as against 1,388 produced in the pre-

vious year and installed capacity of 1,800 tonnes. Production was affected, by power restrictions and non-receipt of base raw materials and utilities. Though sales were marginally higher, gross profit declined sharply as margins deteriorated. Net profit was more than halved; the dividend stepped up by 4 per cent to 16 per cent is covered less than 1.5 times as against four times last year. The expansion project is in progress and is expected to be completed by the first quarter of next year. The company has now purchased a diesel generating set of a higher capacity which will be commissioned during the later part of this year. One imported generating set was commissioned last year, which helped the company to mitigate the power shortage.



# 'Overpopulation' and the Rural Poor

M V Nadkarni

*Is the poverty of the poor due to 'overpopulation'?*

*This study, based on a socio-economic survey of six villages in the command area of the Jayakwadi Irrigation Project in the Marathwada region of Maharashtra, examines the workforce in six villages to test the popular hypothesis that rural households, particularly the poor ones, are burdened with excessive population. The evidence does not support the hypothesis. The poor households find their manpower an asset — the only significant asset that provides them income — rather than a liability.*

*The evidence shows not only that poor households use their manpower intensively but also that this results in greater productivity per unit of whatever little material resources they have.*

IN spite of the proliferating literature on the 'population problem', those who subscribe to the overpopulation hypothesis do not care to spell out what they mean by 'overpopulation'. In most of the discussions 'overpopulation' is taken to be self-evident. One may perhaps say that there are three versions of the overpopulation hypothesis. One version, set in the macro perspective, states that the given resources of an economy (with the given technology) are not adequate to support the existing population and hence the people are poor. Even if stated in terms of the resource potential (instead of available or exploited resources), the argument is hardly verifiable. The more popular version of the argument is that, with a given income or food supply, a larger population means a lower per capita availability. In terms of growth also, given the rate of growth of national income, a reduction in the rate of growth of population means a rise in the rate of growth per capita. This version of the 'overpopulation' thesis does not merit much discussion as it can be neither proved nor disproved; it is no more than an arithmetic truism and cannot explain the level of income, or why it is what it is.

A confusion often made here is that of identifying unemployment with overpopulation. Unfortunately, it is only with regard to the human asset that its underutilisation is mistakenly taken to indicate unwantedness. If a gold mine is not exploited, no one says it is unwanted. But if there is unemployment, we speak of overpopulation. Nothing is presumably wrong with the policy framework which cannot make use of the human resources; it is only that these unfortunate people should not have been born! Unemployment is more an indication of the way in which the economy is managed and resources are mobilised and of the level of development. If unemployment is taken to indicate overpopulation, it is a tautology. There can exist unemployment even in a country with a low density of population. Even in a

given country, the level of employment can decline in a recession. It is necessary to appreciate this because it is only then that we can find the real factors and policies that promote employment. The alibi of overpopulation diverts our attention from these basic factors and policies.

The second version of the overpopulation hypothesis is set in an intercountry perspective and attributes the poverty of the third world to overpopulation. While conceding that underdevelopment could also be due to lack of manpower, such a situation is held to have been applicable more to countries like USA, Canada and Australia in their initial stages of development. The major factor responsible for the poverty of the present third world is held to be overpopulation and the fast rate of growth of their population. Once this diagnosis is made, the altruistic zeal of the advanced countries expresses itself in terms of aid for family planning projects in the underdeveloped countries. The slogan is: control population to banish poverty. This version of the overpopulation hypothesis is actually derived from the arithmetic truism of the first version. However, it is very helpful in diverting the attention of the third world from the exploitation carried on by the advanced countries. Colonialism, transfer of resources through adverse terms of trade, the role of the multinational corporations, the pressures exerted on the third

world to mould policies in the interests of advanced countries — all these and other things simply recede into the background once the bogey of overpopulation is raised. The accusing finger is at our breeding habits and not at the developed countries!

The third version of the overpopulation thesis is a domestic variation of the second. Once a country is deemed to be overpopulated, the next task is to identify those who are to blame. The idea that the poverty of the poor households is mainly — even solely — due to the large number of children and dependants they have is so deep-rooted among our educated people, administrators and policy-makers that family planning — if necessary with compulsion — is assumed to be the only effective weapon to banish poverty. If there is any resistance to family planning, it is attributed to ignorance and illiteracy or religious superstitions. That the basic economic considerations in relation to family planning can be totally different among the rural poor is hardly appreciated. A significant contribution on this subject was that of Mahmood Mamdani.<sup>1</sup> The evidence presented here corroborates Mamdani's argument. However, whereas Mamdani explains why the poor households desire to have large families, the present study argues that factual evidence does not support the hypothesis that poor households have excess or surplus population. On the other hand, we

TABLE 1 : VILLAGES SELECTED

Village	Tehsil	No of Households	Population	Proportion of Net Sown Area Irrigated (Per Cent)
(1) Sashte-Pimpalgaon	Ambad	473	2607	5.2
(2) Apegaon	Paithan	311	1876	9.8
(3) Patharwada Khurd	Ambad	195	1008	33.5
(4) Balegaon	Ambad	148	775	7.0
(5) Indegaon	Paithan	102	612	7.5
(6) Agarnandur	Paithan	91	545	29.2



TABLE 2 : POPULATION, ITS SEX AND AGE STRUCTURE, AVERAGE SIZE OF HOUSEHOLDS AND AVERAGE SIZE OF OPERATIONAL HOLDING IN THE SURVEYED VILLAGES

Groups	Adults Above 18 Years			Above 6 and upto 18 Years			6 Years and Less	Total	No of Households	Average Size of Households	Land Operated (in acres)		Proportion of Net Sown Area Irrigated (Per Cent)
	M	F	T	M	F	T					Per Household	Per Capita	
Cultivators with													
(1) Upto 2.5 acres	75	83	158	46	37	83	51	292	54	5.4	1.7	0.3	5.3
(2) 2.5 to 5 acres	176	195	371	103	104	207	93	671	112	6.0	4.2	0.7	15.9
(3) 5 to 10 acres	275	289	564	158	124	282	153	999	170	5.9	7.4	1.3	10.0
(4) 10 to 15 acres	144	146	290	79	68	147	96	533	95	5.6	12.8	2.3	14.6
(5) 15 to 25 acres	206	210	416	119	108	227	127	770	106	7.3	19.9	2.7	12.5
(6) 25 to 50 acres	131	128	259	102	75	177	79	515	63	8.2	31.6	3.9	11.4
(7) 50 to 100 acres	49	45	94	23	22	45	22	161	17	9.5	70.5	7.4	3.0
(8) Above 100 acres	26	31	57	12	12	24	10	91	8	11.4	181.9	16.0	9.0
All cultivators (1 to 8)	1082	1127	2209	642	550	1192	631	4032	625	6.5	15.6	2.4	10.7
(9) Agricultural Labour	695	716	1411	344	315	659	492	2562	514	5.0	—	—	—
(10) Artisans	67	66	133	33	28	61	34	228	43	5.3	—	—	—
(11) Shopkeepers	16	19	35	3	6	9	16	60	10	6.0	—	—	—
(12) In regular service	81	76	157	30	39	69	60	286	68	4.2	—	—	—
(13) Others	73	73	146	36	25	61	48	255	60	4.2	—	—	—
All Groups	2014	2077	4091	1088	963	2051	1281	7423	1320	5.6	—	—	—

M : male, F : female, T : total.



TABLE 3 : NUMBER OF WORKERS REPORTED, BY SEX AND AGE-GROUP

Groups	Above 18 Years			6 to 18 Years			All Workers
	M	F	T	M	F	T	
(1) Upto 2.5 acres	67	63	130	10	8	18	148
(2) 2.5 to 5 acres	140	102	242	13	8	21	263
(3) 5 to 10 acres	229	192	421	13	22	35	456
(4) 10 to 15 acres	119	90	209	8	13	21	230
(5) 15 to 25 acres	155	107	262	11	7	18	280
(6) 25 to 50 acres	83	48	131	2	2	4	135
(7) 50 to 100 acres	29	6	35	—	—	—	35
(8) Above 100 acres	26	3	29	—	—	—	29
All cultivators (1 to 8)	848	611	1459	57	60	117	1576
(9) Agr Labour	609	548	1157	71	61	132	1289
(10) Artisans	43	39	82	2	6	8	90
(11) Shopkeepers	13	8	21	—	—	—	21
(12) In regular service	70	14	84	1	5	6	90
(13) Others	64	56	120	2	—	2	122
All Groups	1647	1276	2923	133	132	265	3188

TABLE 4 : PERCENTAGE OF WORKERS TO TOTAL NUMBER OF PERSONS IN EACH CATEGORY (PARTICIPATION RATE)  
(Per Cent)

Groups	Above 18 Years			6 to 18 Years			All Workers
	M	F	T	M	F	T	
(1) Upto 2.5 acres	89.3	75.9	82.3	21.7	21.6	21.7	50.7
(2) 2.5 to 5 acres	79.5	52.3	65.2	12.6	7.7	10.1	39.2
(3) 5 to 10 acres	83.3	66.4	74.6	8.2	17.7	12.4	45.6
(4) 10 to 15 acres	82.6	61.6	72.1	10.1	19.1	14.3	43.2
(5) 15 to 25 acres	75.2	51.0	63.0	9.2	6.5	7.9	36.4
(6) 25 to 50 acres	63.4	37.5	50.6	2.0	2.7	2.3	26.2
(7) 50 to 100 acres	59.2	13.3	37.2	0.0	0.0	0.0	21.7
(8) Above 100 acres	100	9.7	50.9	0.0	0.0	0.0	31.9
All cultivators	78.4	54.2	66.0	8.9	10.9	9.8	39.1
(9) Agr Labour	87.6	76.5	82.0	20.6	19.4	20.0	50.3
(10) Artisans	64.2	59.1	61.7	6.1	21.4	13.1	39.5
(11) Shopkeepers	81.3	42.1	60.0	0.0	0.0	0.0	35.0
(12) In regular service	86.4	18.4	53.5	3.3	12.8	8.7	31.5
(13) Others	87.7	76.7	82.2	5.6	0.0	3.3	47.8
All Groups	81.8	61.4	71.4	12.2	13.7	12.9	42.9

find, using several criteria, that the pressure on the available manpower in these households is so great that any presumption that there is more manpower or population than what is economically needed by them is entirely baseless.

The argument here is based on a socio-economic survey conducted by the author on a census basis in six villages under the command area of the Jayakwadi Irrigation Project in the Marathwada region of Maharashtra. The survey was conducted in April and May of 1975 on the eve of the introduction of irrigation in the villages, so that it serves as a bench-mark survey. The reference year was 1974-75. The six villages were purposively selected in consultation with the officials of the Command Area Development Authority (CADA) of the Purna and Jayak-

wadi Irrigation Projects from among those villages which were to receive water on a regular basis from the year 1975-76. Incidentally, all the six villages are in Aurangabad district. They reflect differences in size and development of infrastructure, some of them being in the interior. During the year of the survey, the proportion of irrigated area to net sown area was only 10.7 per cent for all the villages taken together, varying between 5.2 and 33.5 per cent among the villages. This irrigation was not regular and dependable. Though the villages were surveyed on a census basis, a few households could not be canvassed as all their members had gone out of the villages in search of temporary employment, closing their houses. But for this limitation, all the households were canvassed. The villages, the num-

ber of households canvassed, their population and the proportion of net own area irrigated are presented in Table 1.

Of the six villages, Agarnandur — the smallest village — is newly settled, where persons displaced by submergence of land as a result of the project have been rehabilitated. Its area was originally a part of Apegaon. It was canvassed separately due to its special character. A detailed report has been submitted separately to the CADA for Purna and Jayakwadi Irrigation Projects which sponsored the survey.<sup>2</sup> The present paper concentrates only on the workforce in the six villages to examine the hypothesis that poor households in the rural areas are characterised by excess labour or 'overpopulation'.

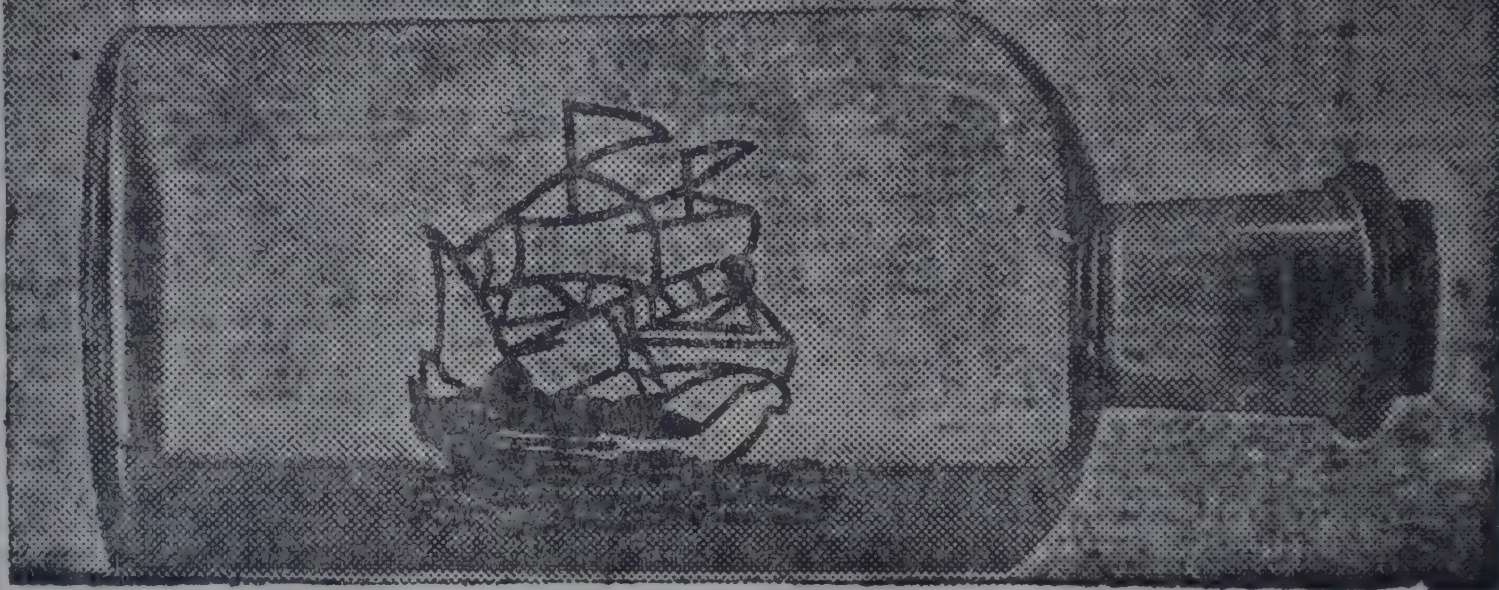
It would be necessary first to have the details of the population and its structure before we study the workforce available. Table 2 presents these details for all the six villages together, according to the categories of households. The cultivator groups have been classified according to the size of the operational — and not ownership — holdings. The land cultivated by all members of the household is taken together here. That is, even if two members have separate ownership titles to land, their land is taken together if they live and cultivate together. Moreover, all households who report cultivation are treated as cultivating households, irrespective of whether it is combined with other occupations (minor or major). The last group 'others' consists mainly of hawkers and non-agricultural labourers, like water-carriers, though they may also engage in agricultural labour as a secondary activity.

Adults above 18 years constitute 55 per cent of the population, children from 6 to 18 years form 27.6 per cent and children below 6 years only 17.3 per cent. But for the biggest cultivator group (above 100 acres), the variation in these figures is not significant either between groups or villages. The big farmers tended to have proportionately more adults. The average household, taking all the surveyed villages together, can be said to consist of 3.1 adults (1.5 males and 1.6 females), 1.5 children in the 6 to 18 years age-group (0.8 male and 0.7 female) and one younger child.

Before we go further, let us first note who constitute the 'poor' households or 'weaker sections'. If we draw the demarcating line at an annual net in-



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come per household of Rs 1,200, households cultivating upto 5 acres, agricultural labour and the last group 'others' can be said to be poor. Together, they account for 56 per cent of the households and 50.8 per cent of the population. The sections on the margin, who may not be as poor as the above households, but who are not much better-off could be identified as those households having an annual net income of above Rs 1,200 and upto Rs 2,400. Cultivators with 5 to 10 acres and artisans belong to this section, and together account for a further 15.2 per cent of the households and 16.6 per cent of the population. If we adopt the criterion of net dependence on earnings from manual labour,<sup>3</sup> we find that all these group of households — the weakest and those on the margin — qualify to be identified as the rural proletariat. The rest of the households, who form only 28.8 per cent of the total number of households, can be said to be the better-off section of the rural society, accounting for 32.6 per cent of the population. Since our focus is on the rural workforce, the tables regarding income of households, etc, are not presented here. The identification of the poor is only to help us to distinguish between them and the others in respect of the workforce.

The poor households tend to have a smaller number of persons than the big farmer households. Among the better-off sections of the rural society, only those in regular service tended to have smaller families. This can be seen from Table 2, which also presents average size of households for all the six villages together. Cultivators tend to have larger families than non-cultivators, but among the cultivators, the size of family among the poor is smaller. The 'overpopulation' argument is not set out in absolute terms. So we need not press the point that the absolute size of households in terms of the number of persons does not indicate largeness of the poor families. What is generally stressed is that their overpopulation is relative to their resources. That they have limited resources may be readily admitted. Table 2 shows land operated per household and per capita in the different groups of households. Land is not only the most important means of production, as the findings of this survey also indicate, but the ownership of means of production other than land also go with control of land. The 'overpopulation' argument avoids saying that a household is poor because it has little control on productive resources. What

TABLE 5: PROPORTION OF SCHOOL-GOING AND THOSE RETAINED FOR HOUSEWORK TO TOTAL NUMBER OF CHILDREN IN THE AGE-GROUP 6 TO 18 YEARS

(Per Cent)

Group of Households	Proportion of School-Going Children			Proportion of Children Retained for Housework		
	Male	Female	Total	Male	Female	Total
Cultivators with :						
(1) Upto 2.5 acres	43.5	21.6	33.7	34.8	56.8	44.6
(2) 2.5 to 5 acres	55.6	26.9	41.1	32.1	65.4	48.8
(3) 5 to 10 acres	73.4	31.5	54.9	18.4	50.8	32.7
(4) 10 to 15 acres	74.7	42.6	59.9	15.2	38.3	25.8
(5) 15 to 25 acres	70.6	36.1	54.2	20.2	57.4	37.9
(6) 25 to 50 acres	80.4	61.3	72.3	17.6	36.0	25.4
(7) 50 to 100 acres	60.9	63.6	62.2	39.1	36.4	37.8
(8) Above 100 acres	91.7	83.3	87.5	8.3	16.7	12.5
All Cultivators	69.0	38.7	55.0	22.1	50.4	35.2
(9) Agr Labour	40.4	15.2	28.4	39.0	65.4	51.6
(10) Artisans	66.7	39.3	54.1	27.2	39.3	32.8
(11) Shopkeepers	66.7	66.7	66.7	33.3	33.3	33.3
(12) In regular service	83.3	59.0	69.6	13.4	28.2	21.7
(13) Others	58.3	20.0	42.6	36.1	80.0	54.1
All Groups	59.7	29.5	45.5	28.1	56.8	41.6

TABLE 6 : PRODUCTIVITY

Size Groups of Holdings	Index Nos of Relative Physical Productivity	Gross Value of Output from Cultivation Per Acre of Net Area Sown	
		Rs	Index Nos
Upto 2.5 acres	110.3	315	104.3
2½ to 5 acres	103.5	285	94.4
5 to 10 acres	107.8	314	104.0
10 to 15 acres	106.7	336	111.2
15 to 25 acres	96.6	305	101.0
25 to 50 acres	98.9	302	100.0
50 to 100 acres	104.1	309	102.3
Above 100 acres	91.5	258	85.4
Average for All Groups	100	302	100

it says is that it is poor because — relative to the resources it owns — it has too many people. Even a beggar constituting a single-member household is poor because his household is overpopulated relative to its resources!

To get beyond this kind of truism we may try to test the hypothesis on the basis of facts. We can see if there are signs or indications of excess population among the poor households. We may first note the size of the workforce reported from the total population. The number of persons reporting some gainful economic activity or the other can be said to constitute the workforce. But we have included only those persons in the workforce who report some economic activity as their main occupation. Consequently, women who report housekeeping as their major occupation and students are excluded, even if they occasionally participate in some economic activity

or the other (particularly cultivation or agricultural labour). This is in conformity with the concept adopted in the 1971 census and does not inflate the number of persons needing gainful work.

The data in absolute figures are presented in Table 3 for the surveyed villages together. The workforce available is shown here for each group of households according to the age-groups — above 18 years and 6 to 18 years — and sex. For economy of space, the figures of total population and workforce are not shown for each village separately in absolute terms. There are in all 3,188 workers, forming 42.9 per cent of the total population of 7,428. Of them, 2,923, i.e., 91.7 per cent, are above 18 years. Since a significant proportion of women are mainly housewives, males dominate the workforce in this age-group, forming 56.4 per cent. In the younger age-group, how-



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APPENDIX TABLE 1 : PROPORTION OF WORKFORCE TO TOTAL POPULATION  
(Per Cent)

Household Groups	Shasthe Pimpal- gaon	Ape gaon	Pathar- wada Khurd	Bale- gaon	Inde- gaon	Agar- nandur
Cultivators with						
(1) Upto 2.5 acres	50.0	43.1	69.2	51.2	67.7	48.4
(2) 2.5 to 5 acres	31.9	36.8	39.0	42.4	50.0	46.8
(3) 5 to 10 acres	44.7	44.8	39.3	45.9	60.0	50.0
(4) 10 to 15 acres	40.8	45.5	59.5	42.3	34.4	36.7
(5) 15 to 25 acres	31.5	48.9	38.8	47.5	27.4	**
(6) 25 to 50 acres	18.1	37.8	29.5	38.2	17.0	**
(7) 50 to 100 acres	20.0	26.7	27.2	**	**	**
(8) Above 100 acres	30.2	37.5	12.5	**	**	**
All cultivators	32.7	42.2	38.8	44.5	38.8	46.7
(9) Agr Labour	53.2	48.6	48.7	52.2	46.3	47.5
(10) Artisans	46.2	42.4	29.4	20.0	22.2	28.6
(11) Shopkeepers	34.1	57.1	20.0	**	**	28.6
(12) In regular service	28.1	33.7	35.3	40.0	30.8	40.0
(13) Others	47.5	48.2	53.8	47.4	37.5	100.0
All Groups	40.9	44.1	43.2	46.8	40.4	45.9

\*\* No households in this group.

APPENDIX TABLE 2 : PROPORTION OF SCHOOL-GOING CHILDREN  
(Per Cent)

Household Groups	Shasthe Pimpal- gaon	Ape- gaon	Pathar- wada Khurd	Bale- gaon	Inde- gaon	Agar- nandur
Cultivators with						
(1) Upto 2.5 acres	100.0	52.9	*	25.0	20.0	25.0
(2) 2.5 to 5 acres	45.5	44.9	17.8	57.9	40.0	37.8
(3) 5 to 10 acres	59.5	42.9	42.9	82.2	64.3	50.0
(4) 10 to 15 acres	80.0	50.0	78.6	50.0	64.7	83.3
(5) 15 to 25 acres	54.5	43.2	31.0	71.4	67.9	**
(6) 25 to 50 acres	75.6	71.0	53.6	88.9	73.3	**
(7) 50 to 100 acres	60.0	70.0	60.0	**	**	**
(8) Above 100 acres	90.9	77.8	100.0	**	**	**
All cultivators	63.0	49.7	43.4	67.3	61.5	35.2
(9) Agr labourers	34.9	17.4	26.5	23.4	31.1	38.6
(10) Artisans	55.9	69.2	50.0	*	0.0	33.3
(11) Shopkeepers	66.7	*	*	**	**	*
(12) In regular service	78.1	57.9	77.8	100.0	80.0	0.0
(13) Others	52.4	28.6	*	0.0	*	*
All Groups	53.3	25.1	30.1	56.6	53.4	35.7

\* No children in the 6 to 18 years age-group.

\*\* No households in this group.

ever, males and females are almost equal. Among cultivators, however, the population of female workers is a little larger in this age-group, being 51.3 per cent.

What is specially interesting from our point of view is the participation rate or the proportion of the workforce to the total number of persons in each category. Table 4 presents these percentages for all the six villages together whereas Appendix Table 1 presents these percentages for each village separately. A look at these Tables shows that (though this relationship is not quite smooth) the percentage of workers to total number of persons tends to decline as the size of holding increases and is higher for agricultural labour households than the average for all households. Taking all cultivators together, Table 4 shows

that the percentage of workers to the total population is 39.7 per cent, but among agricultural labourers it is 50.3 per cent. In the smallest size-group of cultivators, it is a little higher than even this, 50.7 per cent. In contrast, this percentage varies between 21.7 and 31.9 in the size-groups cultivating above 25 acres. The decline is more conspicuous and smooth if we consider the percentage of workers among female adults and children (of both sexes) in the 6 to 18 years age-group (see Table 4). Whereas 75.9 per cent of adult females report themselves as working in the smallest size-group, only 9.7 per cent do so in the largest size-group. Among agricultural labourers, 76.5 per cent of adult females report themselves as working. Again, 21.7 per cent of children report as working in the smallest size-group,

which drops to zero in the largest two size-groups. Among agricultural labourers, 20 per cent of children in this age-group are reported as working. Appendix Table 1 shows that in spite of variations, either the smallest size-group of farmers or agricultural labourers have the highest participation rates in four out of six villages. The exceptions are Apegaon and Agarnandur. However, we find that in every village, the participation rates are low among farmers with above 25 acres; also, agricultural labourers have higher rates than the average for all groups, and the smallest size-group of farmers have higher rates than the average for all cultivators.

The proportion of irrigated area to net sown area does not seem to explain the high participation rates even among the poor farmers, quite apart from its irrelevance for agricultural labour. Though the smallest size-group of farmers has a conspicuously high participation rate, they have also a conspicuously low proportion of area irrigated, as can be seen from the last column of Table 2. The variation in participation rates as between villages also does not seem to go with irrigation. This can be seen if we compare the last row in Appendix Table 1 with the proportion of irrigated area in each village as given in Table 1.

That the small cultivators have a higher proportion of workers in spite of their small-sized holdings (which presumably need less labour) hardly suggests that they have excess population. If there is a surplus, more of their women could be satisfied with housekeeping only instead of working for wages; and also more of their children ought to be going to school, primary schooling at least being free. The supposed overpopulation in relation to resources (mainly land) cannot be reconciled with the high participation rates. Let us recall here that the participation rates are high among the poor households in spite of the fact that our definition of the workforce is restrictive and excludes occasional workers. The conclusion, therefore, is inescapable. The small cultivators together with agricultural labourers find their manpower an asset — the only significant asset that provides them income — rather than a liability.

As already stated at the beginning, unemployment is not to be confused with population being surplus. The underutilisation of human resources in the rural economy is mostly seasonal, imposed by the economic environment. The prospect of seasonal un-



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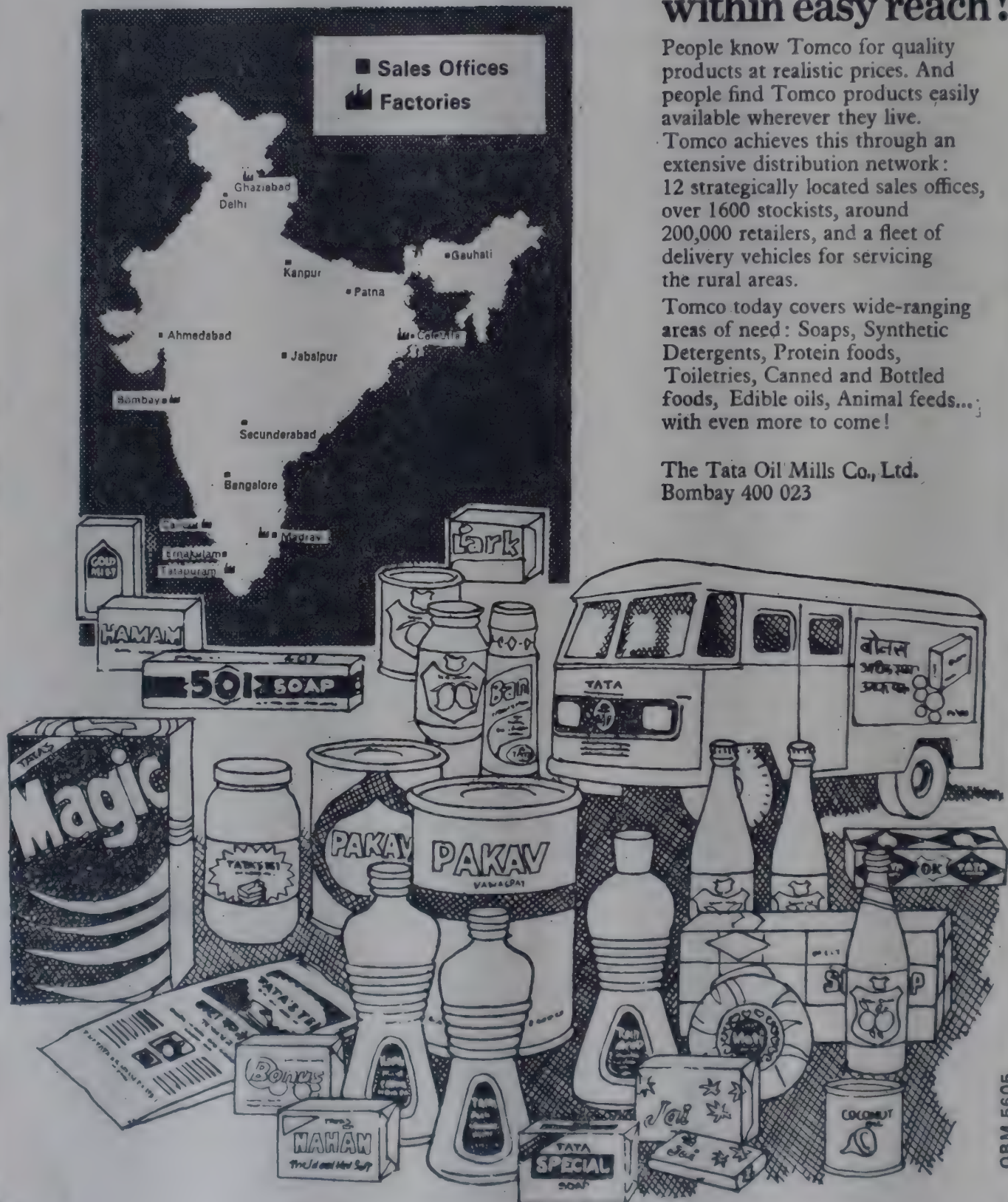
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employment, in fact puts pressure on available manpower in the busy season, to make up for the loss of income in the slack season.<sup>4</sup> This applies both to agricultural labour and small farmers. They cannot afford to lose the opportunity provided by the busy season. With all our talk about overpopulation, the busy season in the villages is marked by labour shortage. That is why there is greater absenteeism in village schools during this season. An indication of the pressure on manpower in the busy season is that even small farmers are forced to hire casual agricultural labour, though not as much as the large farmers. In the villages surveyed, the smallest size-groups of cultivators on the whole spent Rs 42.5 per household on hired casual labour, the next group (cultivating 2.5 to 5 acres) spend Rs 87.7 and the third group (cultivating 5 to 10 acres) spent Rs 136.4 in the year of the survey. As a proportion of their total expenditure on productive activity, this turned out to be, respectively, 15.1 per cent, 13.1 per cent and 12.8 per cent for these groups. Even if this is not considered a high proportion, the fact that they have to hire labour at crucial moments indicates the pressure on the available manpower. Hiring labour is an unwelcome prospect for a small cultivator, for he finds it more difficult to do so than a big farmer who is in a position to oblige agricultural labour with loans in slack season in return for assured labour supply in the busy season. If a small cultivator finds that he cannot manage either with his own manpower or with hired labour at the needed hour, he may even be forced to lease out land on unremunerative terms. Within the harsh limitations under which they have to make a living, the poor households try to utilise their manpower to the fullest extent possible, and can hardly afford the luxury of sparing it for anything other than securing bare subsistence.

The point comes out in bold relief if we focus on the 6 to 18 years age-group. Besides knowing the proportion of workers in this age-group, we should also know the proportion of school-going children and those who are neither school-going nor were reported as workers, i.e., those who are retained for housework. Table 5 presents these proportions for each group of households for all the six villages together.

The proportion of school-going children is lower among agricultural labour households, (28.4 per cent) and

APPENDIX TABLE 3 : PROPORTION OF CHILDREN RETAINED FOR HOUSEWORK  
(Per Cent)

Household Groups	Shasthe Pimpalgaon	Ape- gaon	Pathar- wada Khurd	Bale- gaon	Inde- gaon	Agar- nandur
Cultivators with						
(1) Upto 2.5 acres	0.0	47.1	*	50.0	40.0	47.7
(2) 2.5 to 5 acres	47.7	49.3	67.9	31.6	50.0	43.2
(3) 5 to 10 acres	31.6	40.9	42.9	11.1	14.3	50.0
(4) 10 to 15 acres	15.0	29.6	0.0	38.9	23.5	16.7
(5) 15 to 25 acres	36.4	47.7	51.7	23.8	30.3	**
(6) 25 to 50 acres	21.8	29.0	42.8	5.6	26.7	**
(7) 50 to 100 acres	40.0	30.0	40.0	**	**	**
(8) Above 100 acres	9.1	22.2	0.0	**	**	**
All cultivators	31.2	39.9	44.1	23.8	29.5	44.0
(9) Agr labourers	44.8	65.2	52.1	51.1	55.6	36.8
(10) Artisans	32.4	15.4	16.7	*	100.0	66.7
(11) Shopkeepers	33.3	*	*	**	**	*
(12) In regular service	21.9	13.6	22.2	0.0	20.0	66.7
(13) Others	47.6	57.1	100.0	100.0	*	*
All Groups	36.4	46.3	46.9	30.6	36.8	42.7

\* No children in the 6 to 18 years age-group.

\*\* No households in this group.

small cultivators in the smallest size-group (33.7 per cent) and in the next higher size-group (41.1 per cent) compared to the average proportion for all cultivators (55 per cent) and for all groups (45.5 per cent). Though some children are also reported as workers, as noted in Tables 3 and 4, the major reason for the lower proportion of school-going children in these groups is that it is they who have to bear the responsibility of looking after the household and the younger children so that more adults can go for remunerative work. The proportion of children so retained is 28.1 per cent for boys and as high as 56.8 per cent for girls. For all the groups and villages it is 41.6 per cent for boys and girls together. One can see from Table 5 that this proportion is higher among the poorest households — the two smallest size-groups of farmers, agricultural labour and "others". The proportion of children (both sexes) retained for housework is 51.6 per cent among agricultural labour, 44.6 per cent among the smallest size-group of farmers, 48.8 per cent among the next size-group and 54.1 per cent among the "others". By contrast, it is only 12.5 per cent among the largest size-group of farmers and 21.7 per cent among those in regular service.

The group-wise proportion of school children as well as those retained for housework in each village separately are presented in Appendix Tables 2 and 3, respectively. These Tables also support the above conclusion, in spite of some variations. The case of Shasthe Pimpalgaon where farmers in the smallest size-groups are seen to send all their children to school may seem a

significant exception; however, there are only 4 children in this group in the village, and the two concerned households have some members in regular service — cultivation being only a secondary occupation for them. Such exceptions, however, do not invalidate the general picture.

We can conclude from this that it is the poorest households who generally send the lowest proportion of children to school. The opportunity cost of schooling for them is prohibitively high regardless of schooling being free. Children are very much needed to eke out a living. Considering the role of this age-group among the poorer households, the actual proportion of 'workers' therein appears much larger than what is indicated by our restrictive definition. This is because the definition excludes persons who play an indirect role in securing a living for the family. It is only when the possession of the material means of production — the most significant of which is land — is comfortably large, or when employment is secure enough to provide income fairly above subsistence, that some manpower can be spared or invested in education and adult women can relax or be content with housework. That means that unless poverty is first attacked, the poor households will continue to use all their manpower for securing subsistence and will continue to feel the need for larger manpower. Curbing the size of their families will not solve the problem of their poverty.

As if to add insult to injury, the 'overpopulation' hypothesis does not merely say that the poor are poor because they have excess population, it



also says that their excess population is burdensome to the economy. The economy does not advance rapidly because the poor households do not adopt family planning and breed like rabbits! Let us not press the point here that it is not through the saving habits(!) of the rich but precisely by keeping the large masses poor that investible surplus is created in the society, which leads to growth. The fact that the poor households try to intensively use their manpower results in greater productivity of whatever little material means of production they have. This is brought out clearly by the empirical evidence about the productivity of small farms. The Farm Management Surveys have shown higher productivity in terms of gross value of output on small farms.

In fact, the contribution of small farmers is underestimated if we consider the value product based on market prices. The monetary valuation of crop output can give greater weightage to cash crops grown more by the big farmers and less weight to the subsistence crops raised more by the small farmers. Market prices are imperfect guides to the social importance of crops. The correct procedure, therefore, should be valuation of output based on some prices indicating the social importance of the crops. In the absence of such social prices, we may try to counterbalance the value product by taking note of physical productivity. We may, therefore, use both the value product per acre and a physical index of relative overall productivity.

In the exercise here, index numbers of relative yields per acre are obtained for each crop and each size-group by dividing the yield in the respective size-groups by the average yield for the crop as a whole (for all size-groups) and expressing it as a percentage. This will show for each crop how the yield per acre in a given size-group stands in relation to the average for all the groups. Once these index numbers of relative yields are obtained for each crop, these can be averaged for each size-group for all the crops together. Instead of a simple average, the average weighted by the area under each crop is more meaningful as it takes note of the area devoted to different crops. These weighed averages of index numbers of relative physical productivity<sup>5</sup> are presented in Table 6 for the different size-groups of holdings along with the gross value of output per acre of net sown area for all the villages together.<sup>6</sup>

To facilitate comparison, the index numbers of the latter are also presented, with the average gross value of output for all groups as the base (=100). Table 6 shows that in terms of physical units, the productivity per acre of the smallest size-groups of holdings is the highest; the productivity of the first four size-groups is also higher than that of the others. In terms of value product, the productivity of the smallest size-group ranks second, the fourth size-group (10 to 15 acres) having the highest figure; except for the second size-group (2.5 to 5 acres), the productivity of the four smallest size-groups is also higher than that of the rest.

There is, therefore, some ground for stating that the poor households not only use their manpower intensively but also that this results in greater productivity per unit of whatever little material resources they possess. Such a conclusion hardly supports the hypothesis of excess or burdensome population in the poor households. The overpopulation thesis is the result of applying middle class norms to a situation where they are not applicable. It is positively misleading to ascribe the poverty of the poor to the alleged excess of people in the poor households. Instead of blaming everything on overpopulation, it would be more worthwhile to go into the real factors that push some people below subsistence.

### Notes

[The author is indebted to V M Rao and V V Borkar for their valuable comments on an earlier version of this paper. This does not mean that they necessarily agree with the views expressed here.]

- 1 Mahmood Mamdani: "The Myth of Population Control — Family, Caste and Class in an Indian Village", Monthly Review Press, New York and London, 1972.
- 2 M V Nadkarni, "Report on the Socio-Economic Survey of Villages under the Command Area of the Jayakwadi Irrigation Project, 1974-75", June 1976 (unpublished).
- 3 In the sense that their earnings from offering own labour exceed their payment for hired labour. Even the small farmers were found to hire some casual labour during the busy season as is noted later in the text. My thanks are due to Krishna Bharadwaj for suggesting this as a criterion for identification of the rural proletariat.

4 "....although there is a shortage of labour in manpower, it exists only during specific seasons, for a little over half a year. During the other half, there is considerable unemployment. Overall, farm labour in manpower is underemployed. But this does not mean that farm labour is not interested in increasing his family labour. Quite the contrary. ...his income will depend upon the amount of work his family can contract during the busy season. A large family means a greater income during the busy season and higher savings for the slow season". Mamdani, *op cit*, p 95.

- 5 A limitation of these index numbers is that the productivity of jawar-kardi (safflower) mixed crop could not be included, though it was an important crop. This is because though separate output of jawar and kardi could be recorded, the area under them was not demarcated separately. The crop was grown under different proportions in different holdings. Use of the yield rates of jawar and kardi, raised as pure crops also could not be made to separate the areas as the total area for the two crops so derived did not tally with the area under the mixed crops.
- 6 These figures include the jawar-kardi mixed crop.

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# Development and Population

Robert Cassen

*This article draws on recent research to examine the inter-relationships between development and population growth in India.*

*The first part emphasises the role of distributive development in reducing mortality and fertility; the second looks at the impact of population on that development.*

LITTLE of the academic literature these days is willing to attribute poverty in any developing country to the growth of its population. It is more likely to stress the ways in which poverty contributes to the persistence of high fertility, in the face of declines in mortality which are due only in part to improvements in individual levels of living. Poverty itself is explained by the character of the development process, and the way it is shaped by government policies and the behaviour of non-government sectors, or from outside by the injustices of the international economic system, which are all in turn related to the social basis of power in the relevant societies. Yet in a low-income economy the rapid growth of population does hamper development, if what is meant by development is the provision of a decent life, not for some, but for all. Thinking has changed considerably in recent years on the interactions between development and population growth. In what follows we shall try to illustrate the relevance of current views to India's situation, first for the impact of development on mortality and fertility, then for the influence of population on the economy.<sup>1</sup>

## I

### Mortality, Fertility and Development

#### MORTALITY

It is a commonplace observation that mortality decline in developing countries has in some periods been fairly independent of the course of development. This was true for India particularly in the 1950s and 60s when the main effort at control of communicable diseases was made. After the influenza episode of 1918, and the virtual disappearance of plague in the early 1920s, the big killers were malaria, cholera, smallpox and tuberculosis. The Bengal famine of 1943 was something of an anachronism, since although malnutrition has been pervasive in India for a very long time, large-scale famines with excess deaths in seven figures were otherwise unknown after the early years of the century. The identification of the great *melas* as sources of periodic waves of cholera, and the taking of ade-

quate preventative measures there and elsewhere, led to a great reduction in cholera deaths.<sup>2</sup> Kingsley Davis estimated that perhaps 100 mn people in India at any one time were suffering from malaria in the 1930s.<sup>3</sup> By 1963 progress towards eradication of the disease was so advanced that the *Indian Journal of Malariology* ceased independent publication. Smallpox has, or so we may hope, been brought close to vanishing in the last year or two.

There has been some debate on the sources of Third World mortality decline, centred especially on the case of Sri Lanka, and whether it was malaria control, or improved nutrition and so forth that was the main factor in the post-war period. That particular debate has been laid to rest in favour of neither extreme.<sup>4</sup> The data do not permit a similar debate for India; but if one did not believe that the control of communicable disease was the key to the great gains in life expectancy of the 1950s and 60s, it would be hard to know to what else to attribute them. There was little change in average food availability, nor — if the poverty literature is to be believed — better distribution. Improvements in rural water supplies were modest (even today barely 5 per cent of villages have piped water, though no doubt others have benefited from tubewells). Gains in education may have made some contribution, as may also the extension of health services; though it is not usually thought that curative medicine alone has much effect on mortality where other conditions are generally poor. Urban mortality has of course come down considerably, as there has been a great concentration of the benefits of development in urban areas; but only 20 per cent of the population is urban and rural life expectancy has increased too, if not as much as urban.

If control of communicable disease was the chief factor in mortality decline in the 1950s and 60s, we can also understand the present situation in which mortality in India seems to be falling much more slowly, or even fluctuating around a plateau reached some years ago. (It is not at all easy to tell what is happening to mortality. Sample Registration figures in the 1970s began

to fluctuate, but it is hard to say whether this reflects genuine movement or changes in coverage. Some areas of high mortality — e.g. Bihar — are not yet within the scope of the Sample Registration System.) Major gains from campaigns against individual diseases are no longer obtainable without an entirely different approach, and further reductions in mortality are much harder to achieve. They require first and foremost improvements in nutrition, which are a matter of increased food supplies, better employment opportunities, and nutrition education. (The exact extent of malnutrition is unknown; that is understandable as long as it is measured by holding up uncertain data against standards which possess inevitable elements of subjectivity. Nevertheless the high levels of infant and child mortality alone show that it is very extensive: the probability of survival to age 5 in India is still only about 75 per cent.) The other major requirements for reduced mortality are better hygiene and sanitation, more and cleaner water, and the treatment of disease. Apart from raising incomes, the main instrument for bringing such benefits to the majority of people would be a rural health service which actually reached into the villages and instructed the inhabitants in the importance of these measures and enabled them to implement them, to a significant extent with their own resources. There are examples of such health schemes in India and elsewhere,<sup>5</sup> but wider promotion of them does not yet seem to be part of government policy.

It has been observed that a high proportion of tuberculosis sufferers actually present themselves at clinics and are given something for 'cough' and sent away<sup>6</sup> — yet with a few days' training almost anyone could test for the presence of tuberculosis and, if positive, provide medication. Malaria is returning to India, as it is to several other countries which were once close to getting rid of it: the last stages of eradication in circumstances such as India's require the handing over of the malaria campaign to health services capable of surveillance, case-finding and treatment at the local level, as a WHO report recommended years ago.<sup>7</sup> While





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the number of malaria cases may now be in millions, deaths are not all that numerous as the common malaria strain is the relatively weak *vivax*; but the more lethal *falciparum* has also been reported, even in forms resistant to chloroquine. Something that does account for a surprising proportion of deaths is tetanus, according to the — generally untrustworthy — cause of death statistics.<sup>8</sup> This is partly the result of such folk practices as putting cow-dung on wounds, partly a pervasive lack of hygiene. One study in the Punjab found a third of neo-natal deaths to be due to tetanus, mainly because of unhygienic cutting of the umbilical cord by *dais*.<sup>9</sup> But one should always remember the very considerable degree to which disease and death are due to poor personal health practices; this is true not only of tetanus but of many other things, not least nutrition. It is for this reason especially that mortality decline is associated with the diffusion of education.

What is being said, in other words, is that further progress with mortality now is a matter of development. While as the above paragraphs suggest there are a number of specific actions which could make an impact on some causes of death, fundamentally the level of mortality will henceforward be a good indicator of the success of India's development in ameliorating the material conditions under which most people live.

#### FERTILITY

The connections between development and fertility are more complex, but a similar story is to be told. Fertility has been declining, though very slowly — perhaps four points off the crude birth rate over the decade 1961-71, at least two-thirds of it due to reductions in marital fertility.<sup>10</sup> Studies of other cases of fertility decline suggest a number of factors that are associated with it: urbanisation, improvements in female status, education and employment, availability of modern contraceptive methods, economic factors, and, not least, the decline of mortality itself.

In 1961, the UN's "Mysore Population Study" was unable to detect much difference between marital fertility in urban and related rural areas. However recent surveys suggest high rates of ever-use of contraception in urban areas, at least in major cities,<sup>11</sup> and there is little doubt that low urban birth rates reflect reduced marital fertility. There is room for considerable fur-

ther progress with urban family planning, but the rate of urbanisation is slow in India, and is likely to remain so, unless economic performance changes radically. Economic development is in general only very gradually diffusing the 'correlates of fertility decline'. This is particularly the case with the status of women, which is changing extremely slowly in any aspect one looks at, from opportunities for non-traditional employment to decision-making within the home.<sup>12</sup> One might well believe that as long as women have little chance of enjoying status-giving activities outside the family, while within it status may actually depend on child-bearing, the prospects for major fertility decline are for this reason alone somewhat dim. Even if women want less children, their husbands may overrule them. As for female education, which in study after study is consistently related to fertility reduction in nearly every country in the world, one can only lament — and not just on fertility grounds alone — that it is among the most neglected features of development in the great majority of Indian states.

The Fifth Five-Year Plan gives the following figures for educational enrolment (for males and females together): in primary (age 6-11) education, 84 per cent; in secondary (11-14), 36 per cent; in late secondary (14-18), 22 per cent; and in higher education, 4.4 per cent. All those figures represent a doubling or trebling of enrolment rates over the situation 20 years earlier. But while over 90 per cent of males and 60 per cent of females may enrol in primary schools, about 60 per cent of the total may leave school without achieving functional literacy.<sup>13</sup> As the Fifth Plan admits, if children do not go to school or leave after a short stay, the most common reason is their parents' poverty. Perhaps parents also ponder the poor quality of much primary education, and the limited prospects for better employment thereafter, if they are not able to help their children on their way by other means. The 1971 census showed only a 5 per cent increase over 1961 of the proportion literate in the whole population (including the age group 0-4), from 24 to 29.3 per cent. These figures conceal the state of female literacy, only 18.7 per cent of the population as a whole in 1971. In Uttar Pradesh and Bihar, which together constitute one quarter of India's population, female literacy rates in the 1971 census were 10.7 and 8.7 per cent respectively. Clearly this aspect of development in North India has a very long way to go.

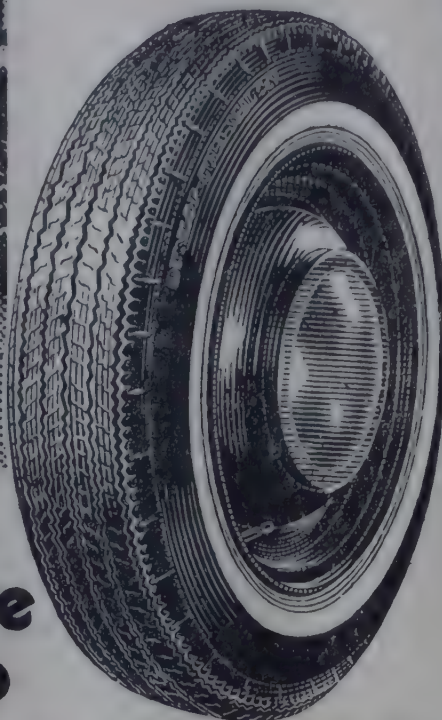
We have already alluded to the high levels of infant and child mortality. These are important to fertility because obviously what parents want are not just babies but surviving offspring. While there have been historical cases of fertility decline without prior mortality decline, they are not much in evidence in developing countries today. S H Preston<sup>14</sup> has referred to two effects, the response of parents to the loss of their own children, or 'replacement' effect, and the response to perceived levels of community mortality. Both effects have been measured in various places and shown to be statistically significant, the second with a lag of greater or lesser duration. As Preston says, the fall in fertility is not usually as great as that in mortality, not immediately at any rate.

As India and many other countries have shown, there can be sustained falls in mortality without much fertility decline over long periods. But if the former are a necessary condition for the latter, then, unless one has reason to believe that if they occur later, the lag before fertility 'responds' will be shorter, it is best that mortality comes down quickly, so that the ultimate level at which the population stabilises will be smaller. It must be remembered that present fertility behaviour is the result of a centuries-long adjustment to conditions of high mortality; only in the last two decades has mortality decline begun to alter sufficiently to challenge the wisdom of that behaviour — and that only for some socio-economic groups. Current fertility decline in India may well be in part a lagged response to these decades of falling mortality. As already suggested, mortality too is a field in which the character of the development process will play a major part in the future.

One of the most striking recent works on the economic factor in fertility was M Mamdani's "The Myth of Population Control", who said that for the Punjab villagers he studied, resorting to family planning would be "to court economic disaster". Several of his interlocutors described how they owed their prosperity to their sons. While this book did an undoubted service in disillusioning anyone who might have thought the whole Punjab was keenly awaiting the arrival of family planning services, it can hardly be thought of as the last word on its subject. It is one thing to find parents who after the event are pleased with the way their families have worked out; it is another to say that before the event they could be confident they would turn out well.



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About 6 per cent of all couples should have four daughters in a row; Mamdani did not interview any of them — indeed he did not find much enthusiasm for daughters at all. (The results of this lack of enthusiasm can be seen in the excess of female over male mortality at ages 0-9, considerable in several states.<sup>15</sup> Parents may also have sons who do not survive into the earning age group, or who survive but do not for one reason or another contribute to the family income. It might be correct that parents had reasonable expectations before the event that a child would make a positive contribution, contrary to what has been said by some commentators;<sup>16</sup> but for many parents those expectations would turn out to be defeated.<sup>17</sup>

One should not imagine that a single account of the economic usefulness of children would hold for all parents in all circumstances. A virtue of Mamdani's book is that he did interview parents in a wide range of social positions, and explore their differing motivations. Yet his account is unable to explain why abortion was extensively practised in the villages in question, or why once IUDs and sterilisation became available, Punjab parents in general took to them quite extensively. In fact many parents perceive the disadvantages of large families — the effects on mothers' and children's health, or even on the economic welfare of their children. Parents who are in a position to educate their children for highly paid jobs can only do so for a limited number of children. The question of land ownership is a complicated one; if all sons can inherit it, the more sons there are, the less each will receive. But better-off families will be able to send some of their children away to urban jobs: it is noteworthy that while rural-urban migrants in India come from poorer areas and villages where land is maldistributed, they tend to be the more-educated children from the higher socio-economic groups in these areas.<sup>18</sup>

But while there may be clear conflicts between the interests of parents and those of their children (in the sense that the children would often prefer to have fewer brothers or sisters), it may mainly be better off parents whose fertility is influenced by the fact. For the poor, children cost very little, start making themselves economically useful very young, perhaps at age 6 or 7, and are the only possible source of security. While an economist might calculate that these small costs would be better invested elsewhere, there might in fact be no alternative investment with a com-

parable real rate of return, and even if there were, poor parents might be practically unable to convert the modest resources children consume into monetary form — they would more likely consume them themselves. Many things may change the economic basis of the large family, including falling mortality and the consequent acceleration of fragmentation of land-holdings, the growing return to non-labour inputs in agriculture, or employment prospects; but the poor parent may for some time continue to find it hard to see any virtue for himself in having less children. Perhaps one of the great advantages of economic development is that it permits parents to put their children's welfare on a par with, or even before, their own. Once one looks beyond the family, it becomes even clearer that, in an economy of acute scarcity, the high fertility of one couple imposes economic disadvantages on others. This is why some writers<sup>19</sup> are beginning to stress the desirability of community-level approaches to development and family planning: until the village itself accepts responsibility for its own members as a whole, the family remains the main instrument for survival in a competitive struggle for existence. The point may be put most graphically in terms of the often mentioned 'pensions motive' for high fertility. There will be no shortage of people to look after parents in their old age; only of people on whom, in an individualistic society, they feel they can rely.

What India's experience shows about the relations between family planning, fertility, and development is not at all obvious. When dissatisfaction with aspects of the IUD and vasectomy programmes was at its height, voices could be commonly heard asserting that India was "not ready" for family planning. In fact while further development of the kind indicated above is clearly necessary before a small family norm is widely adopted, a case can be made out that there is already considerable demand for family limitation in India which is not being met, and that the family planning programme could have done better even at present levels of development.

The first misfortune of the programme was the launching of the IUD on a mass basis in the mid-1960s; it is still a little mysterious how this came about. A large number of clinical trials were carried out in India, and a good deal of evidence was available about performance of the device elsewhere. Whether over-persuaded by foreign ad-

visers, or simply optimistic that the IUD's drawbacks would not be too much of an obstacle, the government went ahead: even today the right conclusions about this episode may not have been commonly drawn. A large number of studies in rich countries have shown that a good average performance with the IUD is a one-year continuation rate of 70 or 75 per cent. Of those who discontinue, about half have the device removed for medical reasons, most often bleeding or pain; a somewhat smaller proportion spontaneously expel it; and a small proportion become pregnant. (The pregnancy rate among women with the loop *in situ* varies from 1 to 2 per cent, or slightly higher.) These are the results for women in good health, often screened for contra-indications, with frequent access to health services, who have usually had the device fitted by an experienced doctor. What this means is that the IUD is a reasonably satisfactory device for a high proportion of women, but there is little way of knowing in advance which women will tolerate it well.

It also means that the IUD can only be used selectively in India: women must be strongly motivated, capable of appreciating but not being alarmed by warnings of possible side-effects, and have access to medical attention if they need it. In poor rural areas where educational standards are low and medical services deficient, the IUD is not suitable for mass promotion. In many clinical studies in India continuation rates similar to those in rich countries were found; though in some, first-year continuations were as low as 40 per cent.<sup>20</sup> One interesting study<sup>21</sup> found that where 20 per cent of women terminated after the first six months, and 60 per cent after 2 years, only 8 per cent actually experienced side-effects which did not respond to treatment; of the rest, many either did not need treatment, or did not try it when offered; several in effect were put off not by what happened to them but what they heard from others, the 'rumour effect'. This study also suggests that with adequate follow-up care, problems can be kept to a minimum. There do seem to be some physiological differences of Indian women from others which make the choice of IUD a matter for care.<sup>22</sup> But apart from the 'rumour effect' the history of the IUD in India is not substantially different from that of other countries. This history does not show either that family planning is doomed to failure in India, or that there is no demand for family limitation: ra-



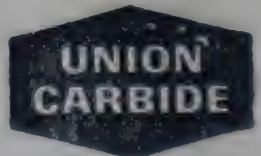
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ther it indicates a substantial desire for controlling births, but one which could not be satisfied — for most women in rural areas, at least — by the IUD, as delivered by the family planning programme, and in the present state of rural health services. In appropriate conditions, nonetheless, the IUD remains a perfectly suitable device.

The story of vasectomies is somewhat different, but some of the same elements are present. Thus rich-country experience<sup>23</sup> suggests that perhaps 50 per cent of vasectomy patients will experience side-effects, but these are almost universally trivial and of very short duration — though possibly disconcerting if there is no qualified person to offer reassurance. No one knows whether Indian men, with poor nutritional status and working long hours in extreme heat, should be expected to tolerate vasectomy less well. Certainly the proportions reporting discomfort or pain or other side-effects have been greater than in rich countries. But it is doubtful that this was the main reason for the difficulties of promoting vasectomy. The majority of men have been satisfied with the operation. While the vasectomy programme encountered numerous troubles, the biggest single factor was probably the behaviour of 'motivators' — people who received a fee for bringing patients in, and were often rather unscrupulous in their methods of persuasion, causing a good deal of subsequent resentment.<sup>24</sup> The 'rumour effect' no doubt played its part here too: stories are legion of men who suffered mishaps of one kind or another after having a vasectomy, and the account would spread so that other men refused the operation. (Arguing *post hoc ergo propter hoc*, one might add, is by no means confined to the Indian villager where bodily functions are concerned.) Vasectomy remains a highly suitable method; the main problem is how to organise it. The camps proved to be disruptive of other health work in rural areas; but this may have been a consequence of their somewhat frenetic character. They make sense from a locational point of view, and perhaps if they were organised without the high pressure — and certainly without motivators rewarded on a per client basis — they could be conducted without the ill-feeling that some of them created in the past.

While the IUD and vasectomies have had the greatest publicity, the nirodh and tubectomy programmes have been more constantly successful. The commercial distribution of nirodh was a real innovation by the Indian family plann-

ing programme; by 1973-74 the point had been reached when more nirodh were bought from commercial outlets than were given away by health units. Further progress is hampered mainly by periodic supply shortages. Both this and the tubectomy programme have been alike in never suffering any backlash from adverse publicity. Both too make it clear that there is an existing clientele for family planning — not perhaps big enough to make a radical difference to overall fertility, but enough to keep an effective programme sufficiently busy to justify its existence, and to build on for the future as the practice of birth control becomes more generally adopted. Other methods — the pill, depo-provera, abortion — could play a larger part, as there is a great need for an acceptable non-terminal method; though none of these are ideal for the entire variety of India's circumstances. Perhaps the greatest contribution at present could be made by a health service of the kind referred to above, an important function for basic health workers being to provide follow-up attention for IUD, vasectomy and other family planning clients.

In this context the issue of compulsion in family planning seems like an unnecessary distraction. It is of course hard for an outsider to judge. The policy itself is in a state of flux, with different statements emanating from people in various positions of authority. It is not clear either what is the intention behind the legislation passed by various state governments, whether there is a real design to implement it, or whether it will be just an ultimate sanction in the background. Perhaps the most difficult aspect is that it must be implemented universally, if at all, since, if it is not popular (and if it were popular it would not be necessary) any appearance of selectivity could cause the gravest problems. The past history of family planning has been one of attempts to gain acceptance of the programme by its clients in their own interests and those of the next generation; a resort to compulsion would deny that history, and at the worst could lead to a backlash of hostility towards the very idea of birth control. There are very many other things that could effectively be done to reduce fertility; one must hope they will be exhausted first before any remedy so drastic and so hard to apply is attempted.

In this section we have explored, albeit cursorily, some of the relations between development and mortality and mortality and fertility. The validity of the case is borne out by inter-state

comparisons, since on the whole both mortality and fertility tend to be lower in states where education is more widespread, economic development more advanced, or its benefits more evenly distributed. This probably has only partly to do with the relations between mortality and fertility themselves, and rather more with the fact that both respond to the same sorts of influences. It is noteworthy that Kerala and Maharashtra, the states with the highest proportion of couples using contraception — over 80 per cent of couples with wives in the age-range 15-44<sup>25</sup> — are by no means well-off by international standards, and are considerably poorer in income terms than those developing countries with birth rates in the region of 30 per thousand. That family planning programmes play a significant part, and can reach even poor and illiterate people, is shown by the fact that in the states where overall contraceptive use is relatively high, use on the part of illiterates is higher than the average for Indian couples as a whole, and in fact higher than use among the educated in some of the 'poor-performance' states.<sup>26</sup> It is difficult to explain inter-state differentials in any field; it always seems that one thing 'works' where everything else does — this is true for family planning as well. Claims that family planning 'input' variables explain more of the differentials than 'development' variables are not very convincing<sup>27</sup> — many family planning outputs cannot occur in the absence of inputs (there cannot be women using IUDs without a programme to provide them); and it is development, or good administration, which may be both cause and consequence of development, that enables the inputs to be deployed.

## II

### Population and the Economy

India may already have experienced its fastest decade rate of population growth between the 1961 and 1971 censuses, at 2.23 per cent annually. The current rate is probably closer to 2.0 per cent, and with fertility declining slowly, but faster than mortality, it could well go lower still before long. Nevertheless, very considerable growth of population lies ahead. According to some recent projections,<sup>28</sup> the 1986 population will be closer to 740 mn than the Fifth Plan's 705 mn, an estimate which was based on quite unrealistic hopes of fertility decline. By 2001 the



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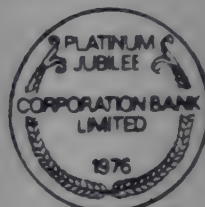


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population could be over 900 mn, and it is hard to see it stabilising below 1000 mn or even 1100 mn some time in the twenty-first century. What this will mean for the Indian economy has largely to be evaluated from past experience. After all, the population has grown by more than 260 mn in the last 30 years — the question is how the next 30 will differ from the last; to that question there is no certain answer.

Earlier accounts of the relations between population and economic growth were quite confident about one or two things. Comparing the economy along two time paths, one with higher fertility (HF) and one with lower (LF), Coale and Hoover's well known work incorporated two main effects: on the former path, savings were lower, and a share of investment was diverted to relatively unproductive uses (capital-widening, especially in social overhead uses, rather than capital deepening). In a fifteen-year period, when fertility differences do not affect labour-force size, total GNP as well as GNP per head was lower under HF than LF; in a longer period, the labour force grows faster under HF, and was allowed a significant effect on production: total GNP grew slightly faster under HF than LF, but not nearly compensating for population growth in terms of income per head.<sup>29</sup> Nowadays there is considerable uncertainty about the magnitude both of the savings and of the composition-of-investment effects, and such simple economic-demographic growth models have been subjected to a good deal of criticism on those and other grounds.<sup>30</sup> Issues other than these gross macro-economic effects are of greater interest, even if the older arguments are not entirely without foundation.

Perhaps the least explored relationship is that between population growth and the productivity of capital in *productive* sectors. It is arguable that up to the early 1960s Indian agriculture required mainly more labour for increased output: but the share of increased output attributable to increasing yields was very much greater between 1962-63-1971-72 than in the previous decade. These increased yields were bought at a high cost in terms of resources relatively scarce in India — capital and foreign exchange. In the early 1960s, imports required by agriculture were negligible; in the early 70s, imports of fertiliser and raw materials for fertiliser absorbed close to 10 per cent of export earnings, and plant and machinery for fertiliser production accounted for substantial further imports. In 1960-61 agri-

culture used electricity measured as 0.8 mn tons of coal equivalent, compared with 4.5 mn tons in 1970-71; the figures for oil are 2.7 mn and 4.5 mn tons respectively.<sup>31</sup> In other words, the amount of electricity used by agriculture rose more than 5 times, and the amount of oil by two-thirds, in a period when agricultural output grew by just under one-third. Unless technological change alters these trends, maintaining the growth of food output will become increasingly expensive in terms of capital and foreign exchange. It may be that as a result of past agricultural neglect these resources could not have obtained a higher return elsewhere; but the point must eventually be reached where the requirement of feeding additional numbers compels the use of resources in low-return agriculture rather than high-return manufacturing, again unless new technology alters the picture. In the language of the old models, the requirements of population growth have induced an increase in the capital-output ratio in agriculture, and this may outweigh the influence *via* savings or the composition of investment, which these models exaggerated.

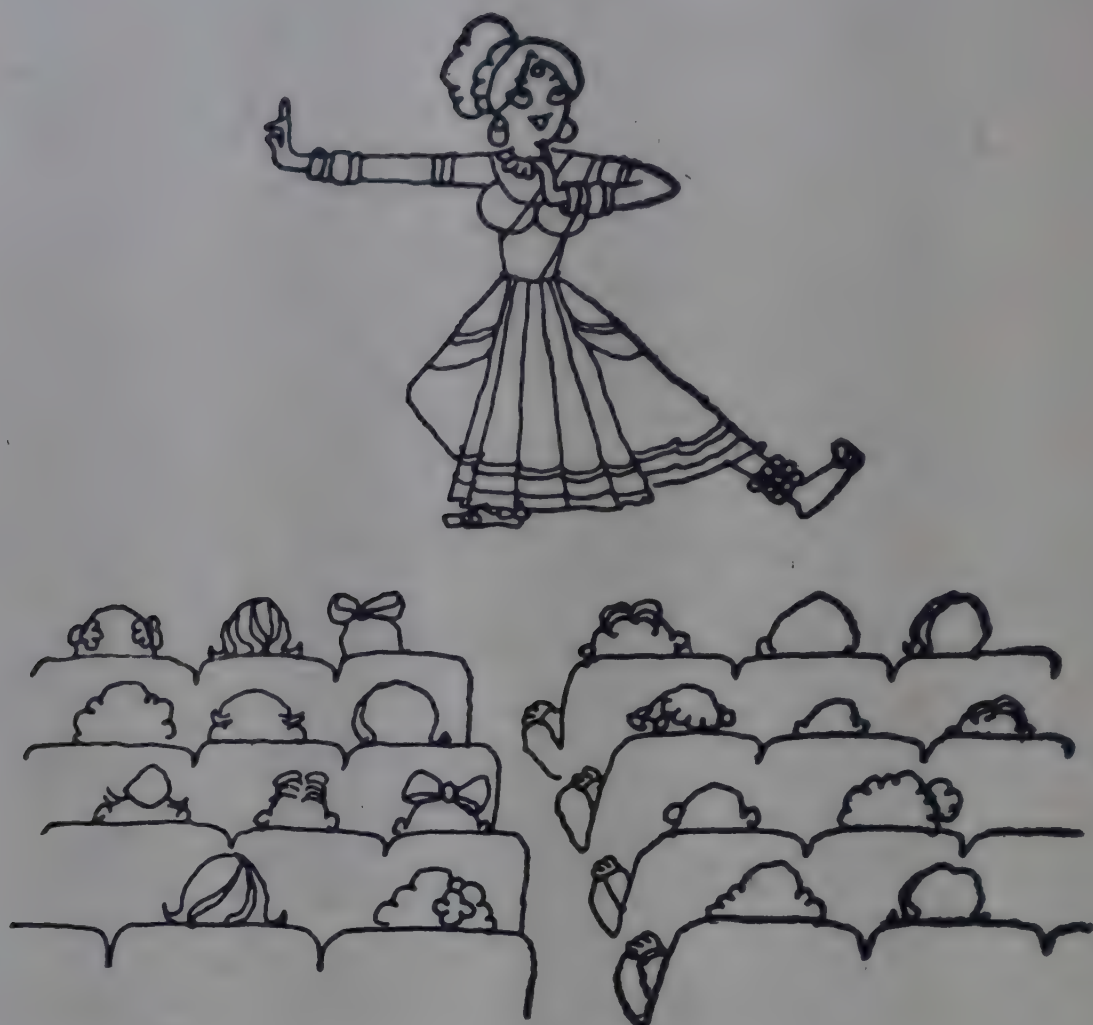
This is not the famous Malthusian argument; the issue is not whether India will be able to keep food output growing faster than population. It is rather that doing so will for some time absorb an increasing volume of scarce resources, resources which could, if the population were not growing, be put to better use elsewhere. This aspect of the food question deserves more emphasis. On the issue of whether India will be able to feed its increasing numbers, most observers are reasonably confident, as far as concerns the supply side. Thus Parikh found the problem manageable up to the year 2001 even under his highest projections of income and population growth; he assumed only further irrigation as currently planned up to 1980, and increased fertiliser use up to currently recommended dosages, with crop-responses to fertilisers no better than those already obtained.<sup>32</sup> Swaminathan also saw the problem as manageable, but requiring a great effort in research and investment.<sup>33</sup> The manageable is not always managed; and the possibility of another year like 1973-74, when poor harvests in India coincided with low international food surpluses for trade, is ever present. But while it would be wrong to feel complacent about supply issues, the greatest difficulties in food and nutrition lie on the demand side, as noted above: even if overall food supply is adequate,

will those who need it have the incomes to buy it? Hitherto the government has faced a serious macro-economic problem in that the prices which elicit sufficient output of food cannot be afforded by the poor, and the gap has to be filled by procurement and subsidy. An important stage in development will be reached when everyone (or at least everyone who is not a 'welfare case') can afford an adequate diet at prices which offer reasonable inducements to farmers.

A related issue is that of employment and economic structure. As long as employment creation (and all it implies) remains an important goal of government policy, rapid population growth in a low-income country postpones the transformation of the traditional economy into one dominated by the manufacturing sector. This is not only because of the agricultural requirements of growing numbers, but also because of the relative investment costs of job-creation in agriculture and manufacturing. The lowest figure for capital per head in the 1972 NCAER survey of small-scale manufacturing units was Rs 2,250; the average was much higher. And even small-scale manufacturing requires complementary investments in power, transport and other less labour-intensive overheads; at the same time, each manufacturing job may create as many as two jobs in service sectors, requiring very little capital. Even so, the investment cost per job in manufacturing and related services is probably not less than Rs 3,750, possibly much higher, and even at the lower figure very much higher than in agriculture. Further, the consumption as well as the investment costs of manufacturing employment may be higher; though the size of the differential between agricultural and industrial earnings is uncertain, as is also the question of whether the differential is matched (and explained) by higher productivity.<sup>34</sup> J Krishnamurthy has adjusted the census figures for changes in definitions, and found the share of the male working force engaged in agriculture to be 69.3 per cent in 1951, 68 per cent in 1961, and 66-67 per cent in 1971 — indeed he suggests the employment structure has changed very little since 1911.<sup>35</sup>

Whether additional workers are valuable to the economy depends on its ability to generate productive employment. The economic-demographic growth models of the past have been misleading on this point too, since they mostly incorporated neo-classical assumptions of smoothly adjusting technology and full employment. They did not confront the





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possibility of ill-adjusting technology and unemployment or under-employment, which has been the actual experience of many poor countries with rapid labour-force growth. Obviously if an economy already has a large number of workers employed at very low productivity, further growth of the labour-force is more of a burden than a benefit, and that is very much the condition of India today. Of course the extent and productivity of employment is not a function of labour-force growth alone; it is the result of the sectoral composition of output and the labour intensity of production in each sector, and these in turn relate to government policies, to the social character of production, and the institutional capacity of the economy to put labour to productive use. Undeniably India could have done better in creating productive employment, had that always been the overriding aim of policy, and had the social and political constraints on the pursuit of such an aim been overcome. But even an India with greatly enhanced capacities for organising labour in productive employment would need a long period of constant labour-force size before it became a high-wage, labour-scarce economy. The productive potential of the economy with a bigger labour-force is greater, and the growth of the labour-force has certainly made a significant contribution to total output. But what matters is whether additional workers increase or decrease output per worker, when all the secondary effects are taken into account. Since as is argued below the arguments attributing positive virtues to population growth for the economy are inapplicable to present-day India, it has to be concluded that continuing growth of population and labour-force is an impediment to the raising of average incomes and the alleviation of poverty. (Perhaps only an academic, who still encounters arguments to the opposite effect, would labour to reach that conclusion.)

Contemporary concern is not just with average income but with its distribution. As with employment, so even more with income distribution one would not wish to ascribe any major role to population growth as opposed to social and political factors. But population growth does play *some* part, and it has been almost completely overlooked in the income-distribution literature, both for India and elsewhere. There are some purely demographic effects: thus a high fertility, declining mortality population would have a progressively younger age structure. This alone could worsen measured income distribution

without any change in age-earnings profiles, simply because a higher proportion of the population is at the young, low-earning end of the spectrum.<sup>36</sup> But more interesting are the influences which operate through differential family-size among people of different socio-economic characteristics. If the main determinant of an individual's income is his or her parents' income, larger family size among the poor than the rich would worsen the distribution of income. Increasing landlessness, which is a feature of several village studies, has a considerable bearing on income distribution. It would be interesting to know whether that had any important demographic component. Unfortunately there is little reliable information on differential fertility mortality and family-size by socio-economic groups. The National Sample Survey, which has attempted more than once to gather it, does not inspire confidence; for example, in the 19th round a strong positive correlation was found between income and infant mortality, with the only comment that 'this may possibly be due to under-reporting of infant deaths in the lower expenditure classes'.<sup>37</sup> Various studies, though by no means every one, suggest lower fertility among higher income groups;<sup>38</sup> but relevant information about mortality and thus family size is rare. There is a rich literature on poverty in India, but it is poor in this respect. Given the importance of demographic information in virtually all its aspects, from the compilation of household consumption requirements to the dynamics of land tenure, perhaps the deficiency will before long be remedied. As it is, one may suspect, but one can hardly show, that differential family size has contributed to the observed worsening of income-distribution.

Various arguments have been put forward in defence of the claim that population growth is 'good' for the economy. We include them here for completeness' sake. A larger population may permit economies of scale — this is no doubt true, but there are no important economies of scale with 600 mn people which were not available to India with 300 mn; further, market-size depends on income and product-mix as well as population, and had the population remained at 300 mn but average incomes grown faster, the economy might now be enjoying much greater economies of scale than it does. And as observed above, if technical change does not reduce average costs, there are diseconomies of scale in at least one

major sector, namely agriculture. Another argument is that population growth stimulates technological advance; while this may have been true in 19th century Europe, it has not been much in evidence in India in the last 30 years, where, indeed, given the strength of the scientific community and the size of the industrial sector, the problem is rather to explain the relative dearth of innovations of commercial value. The argument takes insufficient notice of the nature of modern technological change, which depends mainly on large corporations and government, who may or may not be influenced by population growth. Like other stimulus-response arguments about population, this one falls to the pertinent comment of Coale and Hoover: it is hard to claim that what India needs is further deprivation.

It has been suggested that if population grows rapidly, the average age of the labour force declines, with valuable effects on productivity — this may be valid if the educational attainments of the new labour force entrants are a modernising influence; again, in India today it can hardly be claimed that this effect is, if present at all, adequate to compensate for the disadvantages of population growth already discussed. Finally, it has occasionally been argued that the more people there are, the greater the chance of the advent of the rare genius who adds immeasurably to the quality of life. To apply this to India, as has been done,<sup>39</sup> also seems strange. No one can make a judgment as to whether India is better or worse off with an extra n million people if one of them is a Tagore or a Nehru. But if the present literacy rate is 30 per cent, there are, excluding children below 5 years of age, some 325 million illiterates in India today, among whom must be more than a few whose potential genius will never be discovered.

To return to the future and our question about it, namely whether it will be like the past. Less academic writers often paint lurid pictures of desperate, hungry mobs, violent upheavals and other apocalyptic visions resulting from rapid population growth. On occasion they are not above supporting their case with insulting analogies from laboratory experiments with animals in crowded cages — experiments which are not even a good guide to animal behaviour outside the laboratory, let alone to human behaviour. A case which is harder to refute is that the future has already arrived — the depressing thing about it is its likely similarity to the present. Certainly it is not easy to discern any



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threshold limits to the current pattern of India's development in, say, the next thirty years. There are some environmental concerns about the effects of growing use of agricultural chemicals, about soil conservation, about long-term results of increased use of river and sub-soil water for irrigation. There have been ominous predictions about long-period weather cycles — often contradicted by other predictions. But there is as yet nothing that can be pointed to definitely as a physiological or economic limit to present trends. At the same time, it might be said, there is equally little definite to point to which promises any dramatic improvement in economic performance. As long as population grows at anything like the current — albeit gradually diminishing — rate, the prospect for raising the material level of life of the ordinary man or woman is none too bright.

Probably if there is to be a break with the past, it will be in ways which the economist, the demographer, or the ecologist is ill-equipped to understand. Even economists have been known to suggest that, for example, the greatest problems in maintaining agricultural growth may turn out not to be economic or physiological, but social.<sup>40</sup> This is especially pertinent for India, as the more labour-intensive methods of increasing agricultural output are also socially the most difficult. Indeed some would argue that the more costly technology referred to above was mainly necessitated by the problems of proceeding by other routes. What is unpredictable is the durability of the social fabric under stress. At what point may dissatisfaction with the rate of progress turn into unrest? Will that point come sooner rather than later if progress is accelerated? May new forms of organisation arise in which the poor assert their claims? Contemplation of the relations between population and development only reinforces other arguments in favour of employment-orientated, distributive strategies of development. A policy of 'grow now, distribute later' will be defeated by the continued fast growth of population; as this paper has attempted to show, low fertility comes with education, with the fulfilment of aspirations for a better life. In a low-income economy which cannot afford the trappings of a fully-fledged welfare state, this is only likely to result from the maximum mobilisation of labour, its most abundant resource, in every relevant sphere of development. The success of India's development will be judged by the degree of this mobilisa-

tion. It is an enormous task, not only of employment creation but of training and organisation for self-help schemes in every field, from rural health to the construction of urban settlements. The possibility of lack of success was passed under judgment long ago, in a verse by an anonymous Sanskrit writer of the first millennium AD;<sup>41</sup> the patience and good humour it expresses about adversity may not outlast another millennium:

'My Lord, since you have banished Poverty

From this fair Land, I feel it is my duty

To lay an information that the outlaw

Has taken refuge in my humble home.'

### Notes

- 1 This paper is based on work for a book recently completed by the author: Cassen, R H, "Population Economy, Society: Recent and Prospective Developments in India" (forthcoming).
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- 11 Operations Research Group, "An All-India Survey of Family Planning Practices", Baroda, 1973.
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desired by many Indian women at all levels of society.

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— (Of which Rural & Semi-Urban)	(98)	(392)	(2)
2. Deposits (Rs. crores)*	124.22	365.13	24
3. Advances (Rs. crores)*	74.13	274.32	20
— Of which to			
A. Priority Sectors (Rs. crores)*	21.79	138.14	11
i) Exports	15.41	36.47	2
ii) Other Priority & Neglected Sectors	6.38	101.67	9
4. % Share in Total Advances (3A:3)			
Priority Sectors	29.39	50.35	
i) Exports	20.79	13.29	
ii) Other Priority & Neglected Sectors	8.60	37.06	
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# Recent Trends in Indian Population Policy

Pravin Visaria

*An early decline in fertility is certainly a top priority national goal. Development and a vigorous family planning programme are complements and not substitutes for achieving this goal.*

*The upsurge of strong political support of the family planning programme augurs well for the achievement of a speedy decline in the birth rate. However, it is premature to think of introducing compulsory sterilisation. Persuasion, supplemented by monetary compensation as well as individual and group incentives and disincentives, remains the best policy.*

*Despite the efficacy of sterilisation for family limitation, the criterion for incentives and disincentives should be the number of children and not evidence of sterilisation. In other words, the individual couples must be free to choose the method of family planning.*

*There is need for a substantial improvement in the quantity as well as the quality of work performed by the family planning field workers, but indiscriminate sanctions are likely to be self-defeating and might encourage unscrupulous actions.*

*Innovative suggestions for 'no-birth' years imply an objective of a reduction in the absolute size of population because 'no-death' years are not feasible; they are totally unrealistic.*

THE past 12 months have witnessed a substantial, and unforeseen, growth of political support for the family planning programme in India. Quite apart from the statement on population policy released in April 1976 by the Union Minister of Health and Family Planning, at least three states of Maharashtra, Punjab and Haryana are contemplating the introduction of a compulsory element in the family planning programme.<sup>1</sup> This move has evoked widespread interest all around the world because India's population of about 610 million accounts for 15 per cent of the world population and over 21 per cent of the population of the developing world. People's Republic of China, with a much larger population,<sup>2</sup> is experimenting with a vigorous policy to promote delayed marriage and planning of births through contraception, sterilisations and abortions<sup>3</sup> but much less is known about its actual success (or lack of it) than about the Indian programme. This note seeks to examine the background and the framework of moves for legislation prescribing compulsory family planning in India. The issue of compensations or incentives to couples accepting sterilisation, scaled according to the number of surviving children is also discussed briefly. It is argued that if a community is ready to implement compulsory sterilisation, it would not need it. In any case the higher incentives introduced since May 1, 1976 need to be given a fair trial before any compulsion is introduced for family planning. The novel idea of no-birth years is unrealistic and must be given up.

I accept that the acceleration of India's population growth from an average of 1.3 per cent during 1921-51 to two per cent or a little higher over the past quarter century has, in fact, obstructed the realisation of various

declared goals with respect to the spread of literacy and primary education, health care, employment and wage rates, and capital formation necessary for rapid industrialisation. The rate of growth of per capita income has also been slower than projected in the First Plan's long-term perspective, partly because of the accelerated population growth, in so far as the number of people sharing the national cake has indeed grown faster than envisaged in the early 1950s. It cannot be argued that population growth was an insurmountable obstacle; or that with a different order of priorities, a more efficient management of the national resources or vigorous implementation of accepted or different policies, the welfare objectives could not have been achieved in spite of the accelerated population growth. However, *ceteris paribus*, slower population growth would have meant faster progress towards the achievement of the goals enshrined in the Directive Principles of State Policy or the objectives enunciated in the various five year plan.

More importantly, the recent of current rate of population growth cannot continue for a long period of time. In the present-day world of nation states, emigration on any significant scale is not feasible; but even if it were feasible, it would provide no more than a brief respite. Therefore, the solutions to our problems have to be sought within the national frontiers. An early decline in the growth rate would make a substantial difference to the size of the total population and the labour force in the years to come. And this decline must be brought about by lowering fertility rather than by encountering the grim alternative of a cessation or reversal of the trend towards declining

mortality which has been an important real gain of the past 25 years.<sup>4</sup> One must, therefore, accept a rapid fertility decline as a high priority national goal.

There is some debate, however, about the means of achieving this goal. One view prefers to emphasise general socio-economic development which would lead to a fertility decline as has happened in most now-developed countries of the world.<sup>5</sup> Another extreme view used to pin great hopes on the role of a family planning programme in lowering fertility. However, it would be difficult today to find any one seriously upholding this view. It is generally recognised that development activities and a family planning programme are "mutually reinforcing complements" rather than "mutually exclusive alternatives".<sup>6</sup> In any case, there is little to be gained by blaming the relatively slow pace of development for the limited progress of the Indian family planning programme or *vice versa*. A careful analysis has shown that the efforts of a family planning programme have a greater net effect than the social setting in explaining the variations between developing countries or among Indian states, in the extent of contraceptive practice or decline in the birth rate but the joint effect of the two is much greater.<sup>7</sup> This is hardly surprising because the social setting certainly influences also the various organisational and other aspects of the family planning programme and other correlates.

India was the first independent country in the world to adopt in the early 1950s a policy of lowering population growth through a government-sponsored family planning programme. However, up to about 1965, the family planning programme was largely



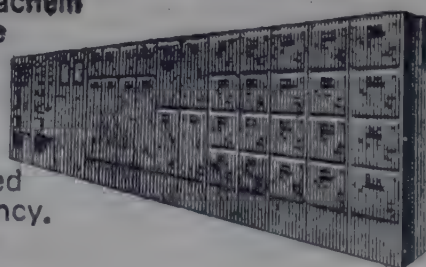
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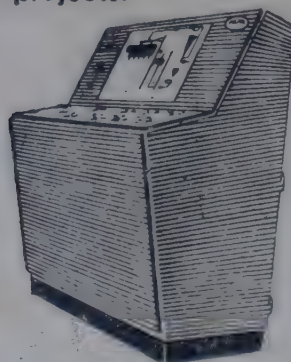
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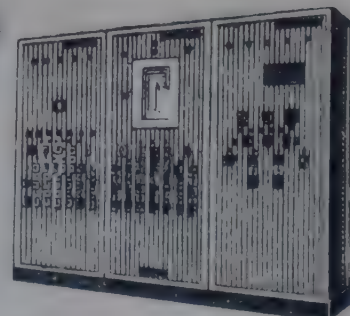
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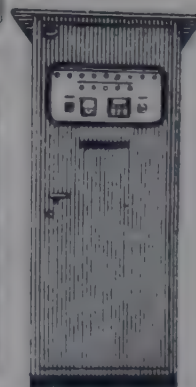
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clinic-oriented, with the exception of some fairly successful camps in Maharashtra (and perhaps in Tamil Nadu). The extension approach, which alone can reach the people dispersed over more than 560,000 villages and some 3000 towns or cities, was adopted in the national family planning programme only after 1963. The organisation of the Family Planning Bureaus in different districts and the appointment of family planning welfare workers, auxiliary nurse midwives and the family planning health assistants in the primary health centres and the sub-centres was completed essentially only in the late sixties. It is hardly correct, therefore, to judge the achievements of the programme in a 25-year perspective. The programme has indeed succeeded in spreading the information about family planning all over the country, although the practice of family planning is much lower than the levels of knowledge and awareness. The achievements are short of our targets and more can and should be done.

Also, among the reasons for an unsatisfactory performance of the family planning programme must be included vaccinations in the official approach. In the wake of mass vasectomy camps during 1971-73, there was considerable optimism that the concentrated devotion of the district administration to the family planning programme can produce significant results. Of course, as is now recognised, the higher than usual financial incentives played an important role in the success of these camps. Yet, during the subsequent financial stringency, when the funds allotted for family planning were cut, the idea of camps was abandoned rather hastily. True, there were other reasons for this decision; but they could have been eliminated with determination and effective government action.

The population policy statement of April 1976 must be seen as a means of recovering the momentum of the programme which was lost after 1972-73. The performance of the family planning programme has definitely improved during 1975-76. Against the target of 2.49 million sterilisations, the actual number exceeded 2.6 million,<sup>8</sup> a second peak after the 1972-73 record of 3.12 million sterilisations. (The central budget for 1976-77 had reported the targets of 3.5 million sterilisations, 1.0 million IUD insertions and 5.0 million users of conventional contraceptives and other methods — a total of

9.5 million acceptors. These targets have now been revised to 10.13 million acceptors — 4.3 million sterilisations, 1.14 million IUD insertions and 4.69 million other acceptors. *The Times of India*, June 3, 1976.) Yet these achievements are not adequate to reach the target of a birth rate of 30 per 1000 by 1979 and 25 by 1984, set in the draft Fifth Plan. (With the projected decline in mortality, the growth rate would be lowered to 1.7 and 1.4 per cent, respectively.)

Given this perspective, several features of the population policy enunciated by the Union Minister of Health and Family Planning at the joint meeting of the central councils of health and family planning in New Delhi on April 16, 1976 deserve to be welcomed. Several of the measures have been under discussion for many years. The belated but welcome resolution to raise the age of marriage to 18 for women and 21 for men may seem difficult to enforce because of the weaknesses of the birth registration system and the resulting problems of identifying a person's age but the educational advantages of such legislation cannot be denied.<sup>9</sup> The removal of population size from among the factors determining a state's representation in the Lok Sabha or its share in the assistance provided by the Centre should eliminate any hesitation by states in implementing the family planning programme with full vigour. Raising the educational level of women and the nutritional status of children are accepted goals which command universal support. It would certainly be useful if a vigorous drive is launched to improve women's education and the nutrition of children because of their relevance to the needs of population policy. Likewise, the proposal to spread the message of family planning throughout the country, using all media, must be welcomed. The Association of Advertising Agencies of India was commissioned to pool together the best available talent to devise a new motivational strategy and a new campaign is to be launched with effect from August 15, 1976. Although this may be criticised as a recourse to the Madison Avenue tactics, it should help to make the task of field workers easier.

The debatable issues in the population policy statement are the increased incentives or monetary compensations, graded according to the number of living children, and the stand on compulsory sterilisation. These deserve detailed discussion.

#### COMPENSATION PAYMENTS OR INCENTIVES

Effective May 1, 1976, the monetary compensation for acceptors of sterilisation has been raised to Rs 150.00, Rs 100.00 or Rs 70.00, according to whether the number of living children of the couple is two or less, three or four or more, respectively. In fact, however, these amounts will be made available to the state governments by the Centre. (The cost of drugs and dressings, etc, is to be covered by these amounts.) Until recently, the Central government used to pay the state governments a fixed sum per tubectomy (Rs 45), vasectomy (Rs 35) or IUD insertion (Rs 8); the states were free to allocate the amount between the acceptor's compensation, payment to canvasser or motivator, para-medical staff and the doctor, and to supplement the amount provided by the Centre.<sup>10</sup> Now the distinction between tubectomy and vasectomy has been removed.

The incentive payment to acceptors of family planning has until recently always been described as a compensation for the loss of wages and out-of-pocket expenses which ensured that the family planning services were available free of cost, right at their door steps. At the same time, employees of the Central government are granted special casual leave for 14 days for non-puerperal tubectomy and for six days for vasectomy. A similar policy was recommended to all employers' organisations which are urged to co-operate with the government in implementing the family planning programme.<sup>11</sup> Now it is clearly recognised that the quantum of monetary compensation "does have a significant impact upon the acceptance of family planning, particularly among the poorer sections of society". To some extent, the increased amounts now offered merely offset the rise in prices and the minimum daily wage rates since the earlier amounts were fixed. One might doubt the need for paying compensation to acceptors of family planning because it is in their own interest. But the case for incentives rests on their role in (a) giving "a push to hesitant potential acceptors" to help them overcome "conservation, fear and procrastination" and to compensate them for costs and (b) affecting the economic costs and benefits of children.<sup>12</sup> The maximum that the society can afford to pay a couple not to have a birth depends on the net social cost of raising an additional child. The actual incen-



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tives offered have been small relative to the maximum that could be paid. The scaling of the compensation amount according to the number of living children is justifiable on the ground that the savings to society in a couple stopping after two or three children are indeed higher. There is certainly scope for misreporting the number of living children in order to get the higher compensation, particularly when or if acceptors choose to be sterilised outside their place of usual residence. However, some certification of the number of children by the village panchayat will mitigate a misuse of the provision.

Some of the dangers in a system of compensations have been amply illustrated in the case stories reported in recent writings of D Banerjee and others.<sup>13</sup> Among political leaders, Sheikh Abdullah, for example, has expressed doubt about "the wisdom or efficacy of giving monetary incentives to promote the family planning programme as there will be a number of risks such as bogus claims, misappropriation and cheating".<sup>14</sup> The advocates argue that people do not accept sterilisations for the sake of small sums of money; the frequently-repeated case stories reflect the experience of only a small fraction of the total acceptors and that the incidence of misuse of compensation system is exaggerated. Further, the problems of corruption are by no means limited to incentives for family planning; they apply with equal force to many other programmes such as differential rates of interest on loans, cash incentives for exports and even relief operations to meet various natural calamities. It is impossible to devise a completely foolproof system or to change the compensation procedures in a manner that would mitigate the dangers of misuse of funds and corruption but would not reduce its effectiveness or increase the bureaucratic red-tape. A system of incentives retains the individual's freedom of behaviour to a greater extent than a compulsory sterilisation law, and, therefore, at least this author finds them more acceptable.

Some of the problems of individual incentives can be limited by greater reliance on community or group incentives. The new policy statement promises "bold and imaginative" group incentives for panchayats at the district and lower levels and for the medical profession, teachers, co-operative societies, and labour in the organised sector. These incentives can be specified in kind and could take the form of facilities for drinking water and/or educational and health facilities which would improve

the quality of life. The gains to individual couples from such group incentives might well depend on their position in the socio-economic hierarchy; and the effectiveness of the incentives might be determined by the extent of community solidarity and rapport between various factions or groups within a village or tehsil, etc. Yet, such incentives can help to strengthen the involvement of local leadership at the village or other levels in promoting the family planning programme. Until the efficacy of community incentives is tested out in the field, it is only proper to use them in addition to individual incentives.

#### DISINCENTIVES FOR LIMITING FAMILY SIZE

For more than a decade now, it has been felt that the provision of various welfare benefits such as maternity leave should be so regulated as to be consistent with the objective of promoting family planning. In June 1967, the Maharashtra state cabinet had decided that with effect from August 15, 1968, free medical care, maternity leave with full pay and allotment of accommodation in the state housing board colonies and government quarters was to be denied to government employees and members of the state legislature who did not restrict their family size to three living children or the then 'present size'. Exemption from school fees, book grants and scholarships (other than those based on merit), loan subsidies provided to low-income earners, freedom fighters and the survivors of defence service personnel were also to be made conditional upon their family size being restricted to three children.<sup>15</sup> It is not known how effectively these decisions were enforced.

During the past year, several state governments have announced their intention or decisions to limit the access to various employee benefits to those who pledge to undergo sterilisation after having two children. In some areas, a similar condition is being prescribed for certain other services such as loans and salary advances or allocations of housing, etc, or at least a preference is given to those who accept family planning. The population policy announced by the Centre does not specify approval for any particular set of disincentives or incentives. Each state is left free to introduce such measures as it considers necessary and desirable. The Central employees, however, are expected to adopt the small family norm and their service or conduct rules are to be modified accordingly.

In the opinion of this writer, the various disincentive measures are entirely appropriate in our situation, despite the element of coercion in them. Most of the government employees are by and large an educated and privileged group, with access to several medical, health and educational facilities for their families and children. They should certainly be encouraged in every way to limit their family size. However, the pressure for a particular method like sterilisation is hardly appropriate. This departure from the cafeteria approach deserves to be given up. It should not be difficult to obtain accurate information from the government employees on the number of living children; and to use that as the criterion for various incentives and disincentives. This modification may imply permitting the use of methods less efficacious than sterilisation; but given the educational status of most government employees, the proposed modification would not affect the programme objectives adversely.

The various incentive and disincentive measures have an important educational role not only for persons directly affected but also for others who come in contact with them. With suitable modifications, these measures can be extended also to the organised private sector and firms employing 25 or more workers.

#### COMPULSORY STERILISATION

It may help to view the recent moves in a certain perspective to recall that at a meeting of Chief Ministers held in New Delhi in the first week of July 1967 to discuss the family planning programme, there was a general consensus in favour of "drastic measures" to control population growth. Apart from the raising of the minimum marriage age, and liberalisation of the abortion law, "compulsory sterilisation after three children" was advocated. The Chief Minister of Maharashtra was congratulated because at a meeting in Chikhalde held in June 1967, the Maharashtra cabinet had recommended (presumably to the Government of India) "immediate legal and constitutional steps to make vasectomy or tubectomy compulsory in the case of all citizens, irrespective of caste or creed, who have three or more children".<sup>16</sup> However, the report of the Small Family Norm Committee in 1968 had laid down the following as the "basic considerations in the propagation of the small family norm":

"In our democratic society, individuals are free to take decisions regarding their family size. There is no place for the use of force, coer-



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cion or compulsion of any kind. The structure of the society, the social mores and cherished values have to be respected. The idea of small family does not have to come in conflict with the religious and sentimental susceptibilities of the individual or the society and no new problems need be created in the process of its adoption as a practising ideal by the people. The accent has to be on persuasion and education to secure the willing involvement of the people.

The responsibility of the couples to their children and society at large has to be invoked. In a large measure, appeals about the happiness and welfare of the family and children have to be made so that individuals may perceive a small family to be primarily in their personal and family interests.

The incentives and disincentives that may be adopted should avoid creating controversy or opposition to the idea of the small family..."<sup>17</sup>

The idea of compulsory sterilisation was thereafter virtually dormant until last year, although Maharashtra is reported to have urged the Centre on several occasions for freedom to pursue the idea. The first hint of a change was the Union Health Minister's poser at a symposium on "Bucharest: A Year After", held in New Delhi on September 1, 1975, as to whether India should "think of the unthinkable" — a statutory limitation of family size — because the target of birth rate in the draft Fifth Plan seemed difficult to achieve. Thereafter, the idea seems to have gathered momentum in several states and even chambers of commerce have shown their enthusiasm for compulsory sterilisation. At the annual session of the Congress Party at Kamagata Maru Nagar, the Prime Minister stated on January 1, 1976, that inadequate support of the family planning programme by the party members partly accounted for the lack of desired success and that the Government would have to take some "strong steps which may not be liked by all" (*The Hindustan Times*, January 2, 1976). The Party responded by calling for "bold and new measures". Several statements thereafter mentioned "drastic steps" to slow down the rate of population growth. The Prime Minister's speech before the 31st Annual Conference of the Association of Physicians of India on January 22, 1976, included a significant statement: "Some personal rights have to be kept in abeyance for the human right of the nation — the right to live, the right to progress" (*The Hindustan Times*, January 23, 1976).

According to the population policy

statement, the Central government does not plan central legislation "at least for the time being", because "the administrative and medical infrastructure in many parts of the country is still not adequate to cope with the vast implications of nation-wide compulsory sterilisation". However, the states which think it opportune and necessary and which have adequate facilities, are given the option to pass the relevant legislation for compulsory family limitation after three children and uniformly applicable to all citizens, without any distinction of caste, creed or community.

It was stated earlier that the Central government was considering the "constitutional, legal and administrative" aspects of compulsory sterilisation bills proposed by Maharashtra, Punjab and Haryana. These issues could be settled with the proposals of the Swaran Singh Committee to (a) introduce "population control through family planning" among the directive principles of state policy in the constitution and to ensure that (b) none of the Fundamental Rights (except those conferred on the minorities and backward classes) should be allowed to be invoked by the citizens where legislative or executive action is intended to be in pursuance of the Directive Principles (*The Statesman*, June 24 and July 3, 1976).

Little is known about the details of the Haryana government's precise plans but the Punjab cabinet has reportedly approved a Population Control Bill which provides for fines and imprisonment for couples having more than two children, except when both children are of the same sex or one is handicapped. Punishment would be waived if either underwent sterilisation after the third child (*The Times of India* March 25, 1976). Maharashtra has pursued the subject with the greatest zeal and a Compulsory Sterilisation Bill received almost unanimous support in both Houses of the state legislature in March-April, 1976. A joint committee of the two houses has examined the bill and submitted its recommendations earlier in July (*The Times of India* July 10, 1976). The bill, renamed as the Maharashtra Family (Restriction on Size) Bill, might be amended further before it becomes a law but the following are its salient features, as modified by the joint Committee.

- (a) Couples with three or more children (including adopted children and irrespective of their State of birth) would be eligible for compulsory sterilisation but those having three children

of the same sex could have an additional child. (The number of the latter is estimated to be no more than 20,000).

- (b) All eligible couples would have to be registered within 90 days from the appointed day; and the director of health services would serve notices on them.
- (c) The local authorities will be required to maintain registers of people with two children and of those with three or more children. It will be the duty of every person with two or three children to make a declaration within 30 days of the appointed day or the date of birth of a child.
- (d) The medical practitioners would be required to sterilise eligible couples even without their consent.
- (e) A pregnancy of less than 12 weeks duration in the case of an eligible couple will have to be terminated.
- (f) In the event of a death or permanent disability due to sterilisation or abortion, a nominee of the person concerned would be paid a compensation of Rs 5,000 and Rs 3,000 respectively.
- (g) An offence would attract an imprisonment for up to six months or a fine up to Rs 500 (with a minimum of Rs 100). The offender would not be kept under imprisonment if he accepts sterilisation or termination of pregnancy during the term of imprisonment.

Apparently, some provision will be made to hear appeals against the official orders for compulsory sterilisation or abortion. In a minute of dissent, the opposition members have proposed exemption for (i) couples without at least one son and (ii) eligible widowers marrying a widow or a spinster. They have recommended nominal punishment of offenders, a judicial determination of compensation to be paid in the event of death or disability and the setting up of the machinery for appeals at the sub-district (tehsil) level rather than at the state level.

According to this writer, the proposed law would be premature. If a community is really ready for implementing a programme of compulsory sterilisation, it would not need it. If the people are sufficiently motivated to restrict child-bearing after the prescribed number of living children, it is largely a matter of providing the requisite services. If, on the other hand, the people have not been

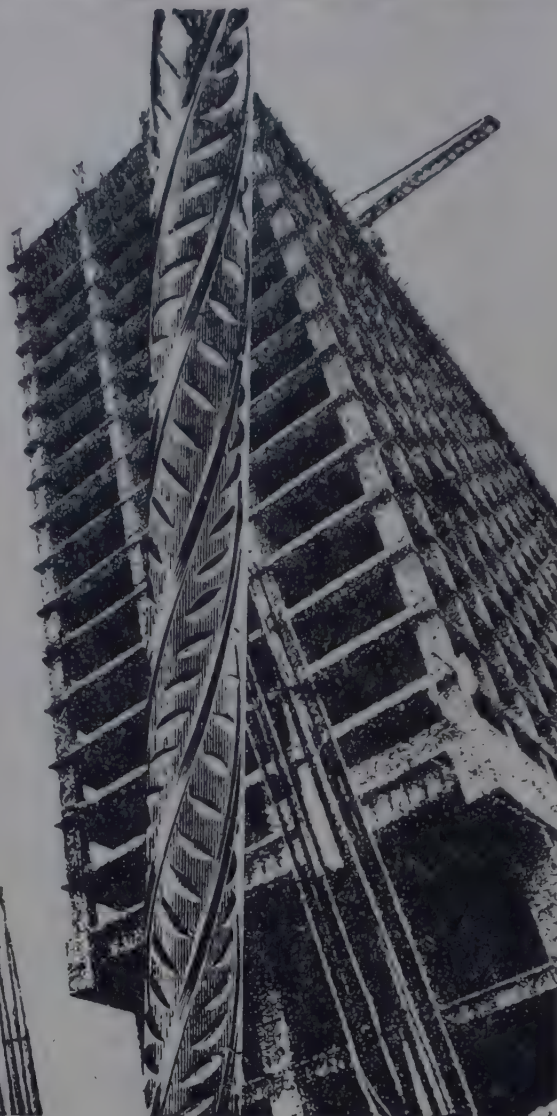


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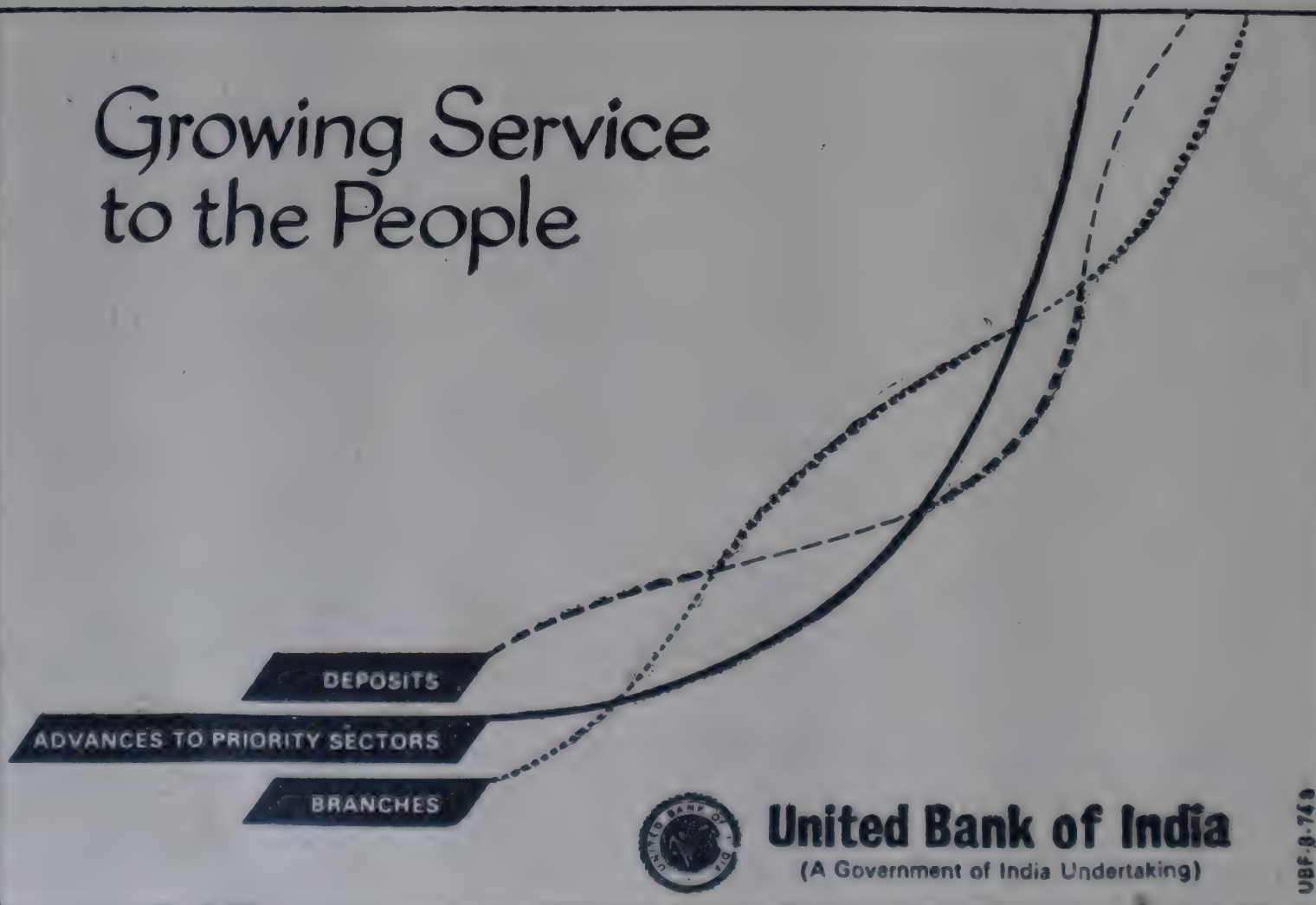
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convinced of the need for limiting a family size, the government cannot implement a law prescribing (a) penalties or (b) imprisonment during which a person would be sterilised or a pregnancy terminated even without his or her consent. Such sanctions would cause considerable distress and would be specially detrimental to the welfare of young children. Any compulsion provokes hostility; and given the dispersion of our rural population, chances of misuse of the law are quite high. The high authorities may promise strict action in cases of such misuse but how realistic is it in our socio-economic setting to think that the poor, who are most likely to be wronged, would be able to reach their ears? In fact, odds are very high that there would be a "backlash" and the effort to introduce compulsory sterilisation would discredit the entire family planning programme.

It is argued that the population problem now needs a direct attack "on a war-footing" and we should not wait for "indirect methods of higher literacy and income".<sup>18</sup> However, if rationalisations are left aside, have we really waited for indirect methods to work, except during a short spell of time after the termination of mass vasectomy camps in 1973-74, some time before and after the Bucharest Conference, when "development" was considered "the best contraceptive"? In any event, it is putting the cart before the horse to argue that effective implementation of compulsory sterilisation would require a "high level of efficiency" which will bring about "a revolutionary change in administration"<sup>19</sup> and will prove an asset for implementing other programmes. No general would first launch a war on the ground that it will generate enthusiasm and prepare the army and the people for sacrifices, which would help to build or acquire the wherewithal of armaments and ammunition required for victory.

It is sometimes suggested that the government will not really need to use the penal provisions of the proposed law. If so, why should it not experiment for a few years with the now-liberalised incentives? During 1971-72 and 1972-73, in mass vasectomy camps held in six and 26 districts, over 95,000 and 374,000 sterilisations, respectively, were performed. They formed 12.5 and 18.1 per cent of the national totals in the two years. Even during 1975-76, why should there be any haste to arouse the fear of penal action? Further, even though Maharashtra is reported to have completed, in all its districts, a survey

of couples eligible for sterilisation according to the proposed bill (*The Times of India*, July 12, 1976), has it done everything necessary to motivate such couples for vasectomy or tubectomy? The state may not lack the doctors required to perform the operations or the up-to-date equipment to strengthen its primary health centres. The KAP (knowledge of attitudes towards and the practice of contraception or family planning) survey data may show that a majority of the people want to limit child-bearing but it has also been seen that the actual practice of contraception is much lower than the reported incidence of favourable attitudes. It is, therefore, most doubtful whether the people would be willing to undergo sterilisation or take recourse to abortion to fulfil the prescriptions of the proposed law.

The introduction of the bill for compulsory sterilisation has given due evidence of the earnestness of authorities to lower fertility and the birth rate. Perhaps, it has been a useful gesture, which will have good educational effects. However, let the state government first ensure compulsory registration of births, deaths and marriages, which would provide the statistical basis for monitoring changes in reproductive behaviour and would prove useful also for any subsequent effort for introduction of compulsory elements in the family planning programme. The marriage registration would make it possible to identify the people who should receive the message(s) for a small family from the very beginning of married life.

One of the arguments in favour of the introduction of a compulsory element in the family planning programme might be actual or alleged differentials by socio-economic-religious class in the acceptance of family planning. The Department of Family Planning has recently published data on the characteristics of acceptors of sterilisation and IUD in the country during 1968-74.<sup>20</sup> A comparison of the religious distribution of these acceptors with that of the population enumerated in the 1971 Census shows the Muslims and the Christians to be underrepresented among the acceptors. However, the reasons for this fact are likely to lie more in the socio-economic characteristics of different groups, which are to a large extent a legacy of the pre-Partition era. Specific data on the subject are hard to obtain, but according to a socio-economic survey conducted in Kerala in 1968, the Muslim households of the state were not much better-off than the scheduled

castes in terms of their median per capita income and both groups were worse-off than the other communities.<sup>21</sup> Perhaps the same situation prevails in other parts of the country although the proportion of Muslims resident in urban areas in 1971 was substantially higher (28.8 per cent) than that in the total population.<sup>22</sup> Yet, according to the analysis of D N Pai, the proportion of Muslims among the acceptors of sterilisation in Greater Bombay during 1968-72 was the same as in the population largely because the number of Muslims among the family planning workers and the number of programmes organised in the predominantly Muslim residential localities was increased relatively to the situation in 1967.<sup>23</sup>

Further, since a reduction in fertility is now an accepted policy goal of all countries in the Indian subcontinent, it should be easy to enlist the support of the Muslim religious leaders in favour of a limitation of the family size. With an imaginative leadership and information drive, it should not be difficult to mitigate and gradually eliminate the religious differentials in the acceptance of family planning.

Sometimes a fear is expressed that as the better-off and the educated, who can raise intelligent children, take a lead in restricting their family size, the continuing unrestricted child bearing by the poor would probably lower the average intelligence of the total population. This writer is not competent to evaluate this argument fully; but it does not seem to be sound. First, the alleged positive association between economic status and intelligence is far from proven. A lack of formal education is certainly not equivalent to ignorance or any lower intelligence. Secondly, the environmental factors and the provision of adequate opportunities and nutrition do have an important impact on the realised level of intelligence of a community. Also, all over the world, the better-off have been the first to adopt family limitation and yet there is no evidence of any decline in the average intelligence of the population of developed countries. Finally, the incentives offered for family planning tend to raise the proportion of the poor among the acceptors above what it would have otherwise been. Therefore, the fear among the elite lacks any firm foundation.

An important factor against compulsion for sterilisation is its differential impact on different socio-economic groups of the population. Assume that the entire population of eligible couples is sterilised after having three living



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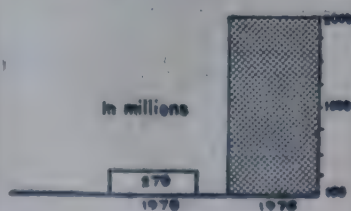
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children. The number of children that will survive up to the time when the parents would need support by children in their old age would be larger in the case of the better-off (whose need for such support might in fact be less) than in the case of the poor. This is because mortality risks and the differentials in them according to socio-economic status are quite high. There is very little empirical evidence on the latter but according to a small survey of 3,000 households in 28 villages of Madurai district in Tamil Nadu, the infant mortality rate among the Harijans during 1970-71 (219 per 1000 live births) was 26 to 55 per cent higher than among the upper castes.<sup>24</sup> Sizeable rural-urban differentials in infant mortality are suggested even by the sample registration scheme (although there is reason to believe that the level of infant mortality and the absolute magnitude of differentials is understated to some extent).<sup>25</sup>

The risk of mortality does fall sharply after the first year of life and therefore the absolute differences would also be smaller at subsequent ages. However, relatively high infant and child mortality rates and sizeable socio-economic differentials in them do imply that the risk of being left without any child (or any son) would be significantly higher for the poor than for the better-off. This is a strong reason for not insisting on compulsory sterilisation. If, however, the government seeks to enact a law prescribing it, the least it should do is to provide a good life insurance coverage for the children of couples who are sterilised against their will. The premium for the insurance policy should be paid by the state.

Further, the state legislators considering the bill must recognise that couples, who are not prepared to accept family planning on their own, cannot be forced to undergo an abortion without serious anxiety and misgivings. A compulsion for abortion on the pain of penalty and imprisonment can have serious psychological effects because many believe abortion as equivalent to the killing of a foetus. What the urban elite may consider misconceptions do indeed have deep roots in the minds of many people. The relevant clause must be modified.

The committee that examined the bill has done well to provide for compensations in the event of a death or disability of the person undergoing sterilisation or abortion. According to the data for the 1960s from several developed countries, the risk of mortality following legal abortions (11 to 255 per one million cases<sup>26</sup>) or sterilisation (10 to 20

per million for tubectomy<sup>27</sup>) performed with normal care is generally low, lower than is associated with a normal delivery. However, there is little basis for compensations lower than paid, for example, to victims of railway accidents or their survivors; and these amounts must be raised. Also, such compensations must be considered for all persons who take advantage of the sterilisation and abortion facilities offered under the family planning programme.

#### INCENTIVES AND SANCTIONS FOR FAMILY PLANNING STAFF

An important recent development, deserving detailed consideration in various quarters is the extent and nature of appropriate pressures for the achievement of family planning targets. The ultimate basis for the setting of various targets at least at the national level appears to have been the desired decline in birth rate, modified, of course by several other factors. In allocating these targets at lower levels, some arbitrariness creeps in because of the need for a certain amount of uniformity in different areas. It is doubtful that due allowance is made for the differences in situations faced by different field workers.

Recently, the secretary to the Central Ministry of Health and Family Planning had written to the chief secretaries of states that a change may be necessary in the structure of family planning programme personnel. One alternative was the replacement of full-time staff by workers who were paid according to the number of cases motivated by them. Or else, the funds released to state governments might be regulated according to their overall performance relative to the targets set (*The Hindustan Times*, January 21, 1976). This suggestion has provoked a wide variety of rather indiscriminate pressures for target achievement.

There is reason to believe that the family planning workers do not work "as much as expected in the basic extension strategy" and the frequency of contact between these workers and their clients needs to be improved.<sup>28</sup> However, the problem is primarily one of their motivations, background and training. Their task, requiring a thorough transformation of the value structure of the people, is undoubtedly very difficult. The training provided to them is generally inadequate. An improvement in this situation requires careful guidance and supervision as well as better communication and feed back between the field

workers and the district and the state headquarters staff. These could be supplemented by a judicious combination of rewards for good work and penalties for insufficient work and poor performance. A large bureaucracy probably has no alternative but to adopt indiscriminate "rules", overlooking the reasons underlying inadequate performance by the dispersed staff. Yet, threats to suspend or withhold the salary of family planning workers who fail to fulfil the assigned targets can prove self-defeating.

It may be thought that given the difficult employment situation, the suspensions or withholding of increments will not have an adverse effect on the availability of family planning personnel. However, the morale can fall very low and objectives underlying the sanctions may remain unfulfilled. At the end of June 1974, the auxiliary nurse midwives (ANM) and family planning health assistants (FPHA) actually employed in rural family welfare planning centres formed 90 and 78 per cent, respectively, of the sanctioned posts.<sup>29</sup> Even in the urban centres run by the state governments, only 71 per cent of the sanctioned posts had actually been filled in. And the growing emphasis on sanctions for the non-fulfilment of targets would make family planning work even less attractive. Even rapid turnover would be detrimental to the programme because it would imply waste of such training as was provided. There is a real danger also that field workers seeking to retain their jobs may, in desperation, adopt unscrupulous methods for meeting the targets and frustrate the basic objectives of the family planning programme.

The UP government is reported to have made promotion of family planning a statutory duty for all its employees. Those who fail to fulfil their quota will be denied their annual increments whereas those exceeding the quota would be granted a special increment (*The Times of India*, June 6, 1976). If this report is true, one cannot but wonder about the qualifications and the ability of all employees to undertake the task of motivating couples to plan their families. Is it reasonable to think that a task, which is difficult for even the family planning workers specially appointed and trained (although briefly) for it, will be suitable for all employees of the state government? A person can be held responsible for the performance of a task for which he was



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appointed and trained but not for other complex activities; and extreme pressures are most inappropriate in the delicate task of altering people's reproductive behaviour.

#### NO BIRTH YEARS

A novel proposal during the recent months — a unique Indian contribution to thinking on population planning — has been the concept of "no-birth" year. The UP government reportedly wants only couples with three children to observe the next two years as "birth-free" years (*The Times of India*, May 13, 1976). The Maharashtra government, however, is considering a proposal to declare 1977-78 as a "palna band" (no-birth) year (*The Times of India*, July 3, 1976). According to the state Health Minister, Maharashtra is "fully-prepared to make a success of the 'no-child year'" (*The Times of India*, July 12, 1976). Elsewhere, in private conversation, a social scientist has expressed a preference for several or a series of no-birth years for the country as a whole.

According to one view, the idea of a no-birth year has been formulated to prepare the people of Maharashtra for the acceptance of the various provisions of what is now proposed to be called the Maharashtra Family (Restriction on Size) Bill. (Perhaps, it would release the doctors involved in maternity work for sterilisations and abortions.) However, since it is not possible to declare a "no-death" year, the proposals for "no-birth" or "child-free" year(s) really aim at a reduction in the total population of the state. While Maharashtra views this as a temporary goal, the social scientist's preference for it for several years at the national level is a preference for a sizeable reduction in the total population of the country.

For quite some time, there have been some small-scale movements in different parts of the world for a zero population growth (ZPG). In some countries such as United States, Bangladesh and Indonesia, enthusiastic groups have thought of achieving the target of ZPG, sometimes in a very short period of less than five years. But enthusiasm has now been stretched to its limit.

The idea of no births for one or more years may appear attractive; but notwithstanding the assurance of the Maharashtra Health Minister, it is virtually impossible to achieve it except in small areas or groups. In any large group, it can be achieved only by misreporting the year of birth. If there are to be no births during 1977-78, i.e.

after April 1, 1977 and up to March 31, 1978, either there should be no conceptions, effectively: during June 20, 1976 to June 21, 1977 (assuming an average pregnancy duration of 280 days); or the conceptions should be terminated. Of course, one possibility is not to report births, or to misreport the timing of births which have occurred, something not unthinkable with the prevailing quality of birth registration. Even in countries with a complete registration of births and deaths, people might report these events (particularly births) as having occurred at a different time. In Japan, 1966 was what is widely considered an inauspicious year in its 60-year cycle. The birth rate dropped from 18.6 in 1965 to 13.7 in 1966 and shot up again to 19.4 during 1967.<sup>30</sup> According to some analysts, one of the underlying factors was a delayed registration of some births. This option would not be available if several years were to be "no-birth" years.

In fact, however, even if it were possible to eliminate all births for a year or two, it may not be desirable because of the likely dislocations in the subsequent years. To illustrate, some five to six years after the no-birth year there would be no one entering the primary schools and the impact would be felt in different grades in the subsequent years. One may seek to overcome the problem by reallocating the teaching personnel, etc, but it is obvious that the innovation under consideration in Maharashtra will indeed entail some unwanted consequences if it were ever to move beyond the stage of speculation and wishful thinking.

#### INTERRELATIONSHIP BETWEEN MORTALITY AND FERTILITY DECLINE

The space constraint precludes any detailed discussion of the interrelationships of health or a decline in mortality and fertility decline. Many regard a decline in mortality, particularly infant and child mortality, as an important pre-requisite for a fertility decline. This reasoning appears plausible because parents think about the number of surviving children rather than the total number of births and their reproductive behaviour is conditioned by experiences of a high mortality situation that prevailed for centuries before the recent fall in mortality. A cross sectional analysis of the sample registration data for rural areas of 11 major states has shown a statistically significant positive correlation of 0.8 between infant mortality and the estimat-

ed level of fertility, significant at the one per cent level of significance.<sup>31</sup> However, studies in other developing countries, based on the behaviour of individual couples, indicate relatively small differences in the number of children born according to the couples, experience of infant or child mortality. In other words, couples are either not able to or do not always try to replace a deceased child. Also, it is estimated that even a drastic decline in mortality may not lead to a significant direct fertility reduction of more than 5-10 per cent.<sup>32</sup> The primary and immediate effect of further declines in mortality will therefore be to raise the rate of natural increase.

In Kerala, however, the pace of fertility decline in different districts over the past decade or so is reported to be associated positively with the availability of facilities for curative medical care. It would require a massive investment in health infrastructure before the rest of the country attains the level of health and medical care available in Kerala. Despite the large increases in the output of trained medical manpower since Independence, health and medical care, particularly in rural areas, remain a luxury, which not many can afford.<sup>33</sup> The problems are too well known to need detailed discussion here. All one can hope is that the health strategy being evolved<sup>34</sup> must be combined with an improvement in rural water supply and also a massive campaign to educate the people about various preventive measures that would reduce the risk of disease and that are feasible within the resources at their command.

#### CONCLUSION

To sum up, an early decline in fertility is certainly a top priority national goal. Development and vigorous family planning programme are complements and not substitutes for achieving this goal. The upsurge of strong political support of the programme augurs well for the achievement of a speedy decline in the birth rate. However, it is premature to think of introducing compulsory sterilisation. Persuasion, supplemented by monetary compensations as well as individual and group incentives and disincentives remains the best policy. Despite the efficacy of sterilisation for family limitation, the criterion for incentives and disincentives should be the number of children and not evidence of sterilisation. In other words, the individual couples must be free to choose the method of family planning.



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There is need for a substantial improvement in the quantity as well as the quality of work performed by the family planning field workers but indiscriminate sanctions are likely to be self-defeating and might encourage unscrupulous actions. Innovative suggestions for 'no-birth' years imply an objective of a reduction in the absolute size of population because 'no-death' years are not feasible; they are totally unrealistic

### Notes

- 1 A few months ago, Karnataka and West Bengal were also reportedly considering legislation for compulsory sterilisation after two or three children (*The Statesman*, February 24, 1976; *The Times of India*, April 13, 1976). However, they have apparently abandoned the idea at least for the present (*The Times of India*, May 11, 1976; *The Statesman*, June 16, 1976).
- 2 Very little is known about the size or the vital rates (the birth, death and natural increase rates) of the population of the People's Republic of China which had its last census in 1953. Available estimates or rather conjectures place China's mid-1976 population between 869 and 964 million and its growth rate at between 1.4 (birth rate: 26 per 1000, death rate: 12 per 1000) and 2.4 (birth rate: 37 per 1000, death rate: 13 per 1000) per cent. The medium variant of the latest UN projections, prepared in 1974, envisages for China (including Taiwan) a population of 838 million in mid-1975 and an average natural increase of 1.6 per cent (birth rate: 25, death rate: 9) during 1975-80. The UN estimates and the conjectured low growth rate noted above, imply a rather significant success in lowering the Chinese birth rate from about 40-45 during and up to 1954-1957 to 26-29 around 1975-1976. See: Leo A Orleans, "China's Population: Can the Contradictions Be Resolved?" in: "China: A Reassessment of the Economy", a compendium of Papers submitted to the Joint Economic Committee, Congress of the United States, Washington, US Government Printing Office, 1975, pp 69-80. (Reprinted with minor changes in: *Studies in Family Planning*, Vol 7, No 2, February 1976.)
- 3 Pi-Chao Chen and Ann Elizabeth Miller, "Lessons from the Chinese Experience: China's Planned Birth Programme and Its Transferability", *Studies in Family Planning*, Vol 6, No 10, October 1975.
- 4 There is some suggestive evidence, however, that the rate of mortality decline has slowed down. See: Pravin Visaria and Anrudh K Jain, "India: a Country Profile", New York: The Population Council, May 1976, pp 15-16.
- 5 Some recent research by Ansley Coale at Princeton University suggests, however, that in the central Asian Republics of the USSR, there has been very little decline in marital fertility, at least up to 1970. This persistence of high marital fertility despite the substantial socio-economic development over the past 50 years leads one to ponder over the threshold of development beyond which a spontaneous fertility decline can be expected. In the rest of the developed world also, it is difficult to identify any specific critical level of variables like infant mortality, literacy and industrialisation or urbanisation preceding the fertility decline.
- 6 Visaria and Jain, *op cit*, pp 42-43.
- 7 Ronald Freedman and Bernard Berelson, "The Record of Family Planning Programmes", *Studies in Family Planning*, Vol 7, January 1, 1976, pp 15-19; and K S Srikantan, "Comparative Analysis of the States of India: Family Planning and Socio-Economic Infrastructure" (New York: The Population Council, May 1975), mimeographed.
- 8 In the past, the achievement exceeded the targets of sterilisations only in 1967-68 and 1971-72.
- 9 Since 1971, the Chinese policy seeks to raise the marriage age to 28 for men and 25 for women in urban areas and 25 for men and 23 for women in rural areas. See: Pi-Chao Chen and Elizabeth Ann Miller, *op cit*.
- 10 An additional amount was sanctioned for meals for the patient undergoing tubectomy and also for holding camps. In 1968, the amounts paid to acceptors varied in different states between Rs 10 to Rs 30 for vasectomy, Rs 15 to Rs 30 for tubectomy and from nil to Rs 7 for IUD. See: Government of India, Ministry of Health, Family Planning and Urban Development, Small Family Norm Committee Report, 1968, New Delhi, pp 73-77. In the mass vasectomy camps organised in Ernakulam during 1970 and 1971, besides the Central and state governments, the panchayats, some private business firms, the public and CARE also made contributions to raise the compensation payments to acceptors up to Rs 86 and Rs 114 in the first and second camps, respectively. See: Veena Soni, "The Ernakulam Camps: An Analysis", New Delhi, The Ford Foundation, 1971, pp 14-15; 59-64. During 1974-75 and after, the district panchayats in Tamil Nadu were encouraged to supplement the Central and the state contributions so that the total amount payable to an acceptor was Rs 100 in most districts. A similar practice was apparently adopted at least in Maharashtra during 1975-76.
- 11 In the People's Republic of China also, paid leave or nutritional subsidies are provided to acceptors of IUD (2 to 3 days) vasectomy (3 to 7 days) tubectomy (21 to 28 days) or induced abortion (14 days for a pregnancy of up to 3 months and 30 days thereafter). See: Pi-Chao Chen and E A Miller, *op cit*.
- 12 Timothy King (co-ordinating author), "Population Policies and Economic Development", a World Bank Staff Report, Baltimore: the Johns Hopkins Press, 1974, pp 99-101.
- 13 D Banerjee, "Will Forcible Sterilisation Be Effective?", *Economic and Political Weekly* May 1, 1976; an unsigned article, "Dangers of Compulsion", *Economic and Political Weekly*, May 22, 1976.
- 14 *Capital*, April 22, 1976, pp 605-606. Many people, both in India and abroad feel the same way. The Indonesian politicians regard incentives for family planning acceptors as bribes. The Indonesian programme initially paid its field workers a small fee per case of IUD insertion; but the practice was stopped after March 1974.
- 15 *Centre Calling*, monthly newsletter of the Department of Family Planning, Government of India, Vol 2, No 7, July 1967, p 8.
- 16 *Centre Calling*, *op cit*.
- 17 Small Family Norm Committee Report, *op cit*, p 7.
- 18 Kumudini Dandekar, "In Defence of Compulsory Sterilisation", *Economic and Political Weekly*, Vol 11, No 21, May 22, 1976.
- 19 *Ibid*.
- 20 Government of India, Ministry of Health and Family Planning, Department of Family Planning, "Family Welfare Planning in India, Year Book, 1974-75", New Delhi, n.d.
- 21 United Nations, "Poverty, Unemployment and Development Policy: A Case Study of Selected Issues with Reference to Kerala", New York, 1975, p 131.
- 22 Census of India, Series 1, India, Paper 2 of 1972, Religion, New Delhi, 1972.
- 23 D N Pai, "Voluntary Sterilisation as a Component of a Family Planning Programme: Keynote Address", in (eds) Marilyn E Schima *et al*, "Advances in Voluntary Sterilisation: Proceedings of the Second International Conference, Geneva, Switzerland, February 25-March 1, 1973", Princeton: Excerpta Medica, 1974, p 18.
- 24 Infant mortality rate was 141 among the predominantly land-owning Gounders and 174 among the other non-Harijans. See K Mahadevan Pillai and D Narayanan Namboothiri: "Caste, Status and Fertility in Rural Area of Tamil Nadu", *Bulletin of the Gandhigram Institute of Rural Health and Family Planning*, Vol VII, No 1, July 1972.
- 25 For example, during 1969, infant mortality rates in UP were 179 and 110 (per 1000 live births) in rural and urban areas respectively. See: Office of the Registrar General, Vital Statistics Division: "Sample Registration of Births and Deaths



- in India, 1969-70", New Delhi, 1972, pp 44-45, 57.
- 26 The range reflects variations in the method used and the duration of pregnancy at the time of abortion. See (ed) R L Kleinman, "Induced Abortion" (a report of the meeting of a panel of experts), London: International Planned Parenthood Federation, 1972, pp 26-28.
- 27 Estimated by Oliver Gillie, "Safety of the Pill", *Science Journal*, July 1970, p 57. No evidence of any deaths attributable to vasectomy was available. As is well known, some cases of tetanus and death following vasectomy were recorded in one of the mass vasectomy camps in Gorakhpur district of UP during 1972-73.
- 28 For an excellent empirical study, see B D Misra, *et al*, "The Dilemma of Family Planning in a North Indian State", *Studies in Family Planning*, Vol 7, No 3, March 1976.
- 29 The target was to have one ANM per 10,000 population working in the sub-centres. Four FPHAs were to be appointed in each rural main centre (at the PHC) so as to work out to an average of one per 20,000 population. In addition, one lady health visitor (LHV) and family planning extension educator (FPEE) is sanctioned for each rural main centre. The percentage of LHVs and FPEEs employed to the sanctioned posts was 60 and 89, respectively. The number of required posts was even higher, significantly so with respect to LHVs and FPHAs.
- 30 Japan, Office of the Prime Minister, Bureau of Statistics, "Japan: Statistical Yearbook, 1970", Tokyo, 1971. Interestingly, the inauspicious year was probably considered a greater risk for daughters than sons. The sex ratio of births rose from 105.3 during 1965 to 107.6 during 1966 and dropped again to 105.3 during 1967. See United Nations, "Demographic Yearbook, 1969", New York, 1970.
- 31 G A Kulkarni: Relation between Infant Mortality and Fertility, *Sample Registration Bulletin*, Vol IX, No 1 and 2 combined, January-April 1975, pp 12-13.
- 32 Samuel H Preston: "Health Programmes and Population Growth", *Population and Development Review*, Vol 1, No 2, December 1975, pp 189-199.
- 33 According to the 22nd Round of the NSS (1967-68), the average minimum cost per visit by an allopath was higher in rural areas (Rs 7.8) than in urban areas (Rs 5.2).
- 34 See a special correspondent's report on "Medical Services: Window-Dressing", *Economic and Political Weekly*, May 8, 1976.

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# Demographic Transition in Kerala

## Facts and Factors

T N Krishnan

*This paper examines the recent trends in birth, death and infant mortality rates — the three key demographic parameters which define the demographic profile of a region — for Kerala and analyses the role of factors like literacy, the age of marriage, the availability of medical care facilities, etc, in this demographic transition.*

*Part I of the paper examines the birth rate in Kerala in relation to the rates prevailing in the other states, analyses the magnitude of the change in it in recent years and isolates the factors that might have contributed to its decline. In part II, the trends in mortality rates and the factors which might have contributed to their decline are analysed. Part III attempts to draw some policy lessons which may be of relevance for general population policy in developing countries.*

BIRTH, death and infant mortality rates are the key parameters which determine the demographic profile of a country. While the mortality rates have started to decline as a result of the extension of medical care and public health facilities in most of the developing countries, the absence of a similar decline in birth rates has aggravated the population problem in these countries. The attempts made so far to strengthen and intensify the family planning programmes have not been very encouraging and some studies even question their contribution to bringing down the birth rates wherever they have occurred.<sup>1</sup> In these circumstances whatever little evidence that one may have on the decline in birth rate for any part of the developing world deserves careful scrutiny and analysis. Such an analysis might help to identify the factors that could have brought about the decline in birth rate in a particular case.

The emergence of a situation where the birth rate is rapidly declining has already been pointed out for Kerala in a recent study.<sup>2</sup> Since the main purpose of that study was to show, using the indirect evidence of primary school enrolment, that the decline in birth rate had started even before the intensification of the family planning campaign in the state, it did not contain either a detailed examination of the extent of the decline in the birth rate or a fuller analysis of the factors which could have brought this about. More information has become available on the pattern and magnitude of the decline in the birth rate in Kerala since then. This decline in birth rate, it is now clear, has been preceded by equally important and dramatic declines in infant and general mortality rates also. How these changes have been brought about in Kerala are

of great significance not only to other states in India but also to developing countries in general since Kerala does not rank high among the Indian states in terms of either per capita state income or per capita daily calorie intake.

According to the latest available estimate, the birth rate in the rural sector of Kerala was only 26.9 per 1,000 in 1974 compared to 35.9 for all-India.<sup>3</sup> While the decline in birth rate in Kerala from 37.4 in 1965-66 represents an impressive achievement, the full measure of the decline in the birth rate can be gauged only when the birth rates for the different districts in Kerala are examined. When this is undertaken, it is seen that in some districts the rural birth rate is as low as 21 per 1,000.<sup>4</sup> A decline of this order in a span of eight years is not only of the greatest significance, but such a low level of birth rate is not probably recorded for any part of the present developing world with a similar level of income. Two countries in the Asian region which have attracted considerable attention for achieving low birth rates in recent times are Sri Lanka and Taiwan. But, in their cases, the birth rates were 29.5 in 1972 and 25.6 in 1971, respectively,<sup>5</sup> and which are higher than the birth rate prevailing in a large part of Kerala.

The mortality rates also have shown similar impressive decline in Kerala. The crude death rate had fallen from 16.1 for the period 1951-61 to 16 by 1965-66 and to 7.9 by 1974, when the corresponding all-India rate declined from 22.8 to 14.4 in 1974. The difference between the all-India and Kerala infant mortality rates shows a similar difference. While the infant mortality rate was 56 for the rural sector of Kerala in 1970, the corresponding rate was 136 for all-India. Though infant

mortality rates are still considerably lower for most of the developed countries, the Kerala rate falls almost within the range of the rates for industrially advanced countries.

The purpose of this paper is to examine the recent trends in the three demographic parameters mentioned above for Kerala and to analyse the role of factors like literacy, the age at marriage, the accessibility of medical care facilities, etc, in this demographic transition. The study mentioned earlier had advanced the hypothesis that the decline in the birth rate in Kerala was closely related to the development of health services and education. In this paper, we shall examine the relevance and validity of this hypothesis in explaining the decline in birth rate in Kerala.

This study is mainly based on the data collected through the Sample Registration System (henceforth referred to as SRS) which was initiated on a pilot basis in 1963-64. SRS aims to provide reliable estimates of birth and death rates, separately for rural and urban areas, at state and national levels. The sample for rural areas usually consists of 150 units in a state, the unit being either the whole village or a segment if the village had 1961 population of 2000 or more. In the case of urban areas, the sample varies from 60 to 100 blocks. A part-time enumerator, usually a teacher, or a full-time enumerator maintains a continuous record of births and deaths as they occur. Once in six months, the supervisory staff conducts a retrospective survey to arrive at an independent set of vital events in respect of the sample unit. The enumerator's record and the results of the six-monthly survey are matched on a unitary basis and unmatched and partially-matched events are verified in



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the field. Thereafter, an unduplicated count of births and deaths is derived, from which the vital events are calculated. This system has been able to measure the birth rate at the national level with a co-efficient of variation of less than 1 per cent.<sup>6</sup> The SRS was tried out in Kerala on a pilot basis during 1964-65 and the full scheme came into force from 1-7-1965; since then annual data on birth and death rates have been regularly published.

The rest of the paper is divided into three parts. In Part I, we examine the birth rate in Kerala in relation to the rates prevailing in other states in India, analyse the magnitude of its change in recent years, and isolate the factors that might have contributed to its decline. In Part II, the trends in mortality rates and the factors which might have contributed to their decline are analysed. Part III is the conclusion where we shall attempt to draw some policy lessons which may be of relevance for general population policy in developing countries.

## I

### TRENDS IN BIRTH RATE IN KERALA

Birth rates for Kerala are available for the period prior to 1966, but these are not based on the SRS. These estimates are based on the inter-censal growth of population and have several limitations but, overlooking them for the present purpose, they indicate

broadly that the birth rate did not decline very much during the period 1931-1966, but declined substantially between 1966 and 1974.<sup>7</sup> The figures given in Table 1 show that, between 1966 and 1974, the rural birth rate in the state declined by 30 per cent (from 37.4 to 26.9). While the difference in the birth rates of Kerala and India was negligible in the period 1941-50, the gap has widened by 1974 due to the lower rate of decline for the all-Indian birth rate.

### AN INTER-STATE COMPARISON

What makes a study of the demographic transformation of Kerala interesting is not the decline as such in mortality rates, (which is taking place in most of the other states also) but the fact that the birth rate has shown such a sharp decline in recent years. In order to provide a proper perspective for this analysis of the extent of the decline of the birth rate in Kerala, we give in Table 2 the data on birth rates for the years 1970 and 1974 and their percentage decline during this period for a number of states in India. Though SRS came into operation by 1965, only by 1970 did it cover most of the states. For purposes of comparison, we have also provided estimates of rural birth rates for 1958-59 based on the fertility survey data of the fourteenth round of the National Sample Survey.<sup>8</sup>

TABLE 1: BIRTH RATES IN KERALA AND INDIA COMPARED  
(Per 1000 population)

Period/Year	Kerala	India
1931-40	40.0	45.2
1941-50	39.8	39.9
1951-60	38.9	41.7
1966 Rural	37.4	NA
1967 -do-	36.3	NA
1968 -do-	33.2	39.0
1969 -do-	31.3	38.8
1970 -do-	31.9	38.8
1971 -do-	31.3	38.9
1972 -do-	31.5	38.4
1973 -do-	29.9	—
1974 -do-	26.9	35.9

A comparison of the birth rates in 1970 among the states shows that they can be classified into two groups, viz, those states whose birth rates had touched levels of 35 and below and others whose birth rates still exceeded 35. In 1970, West Bengal had the lowest rate followed by Tamil Nadu and Kerala, and Uttar Pradesh had the highest rate followed by Haryana and Gujarat. In the former group, the two states which showed the highest percentage declines in the birth rate between 1970 and 1974 were Kerala and Karnataka. In the latter group, Assam showed a rate of decline of the same order. Though the percentage decline were similar in Karnataka and Kerala, the lowest birth rate was recorded for Kerala in 1974. But it must be emphasised that Karnataka follows as a close second. However, this analysis is con-

TABLE 2: STATEWISE BIRTH-RATE AND ITS PERCENTAGE CHANGE BETWEEN 1970 AND 1974

State	Rural Sector				Urban Sector			Combined		
	1958-59	1970	1974	Per Cent Change from 1970	1970	1974	Per Cent Change from 1970	1970	1974	Per Cent Change from 1970
Andhra Pradesh	32.6	35.8	34.6	- 3.4	33.8	32.2	-4.71	35.4	34.2	- 3.4
Assam, inclusive of Meghalaya	37.5	39.5	33.6	-14.9	32.0	24.8	-26.6	38.8	32.8	-15.5
Bihar	32.5	32.4	—	—	28.2	—	—	32.0	—	—
Gujarat	39.5	43.2	40.0	- 7.4	34.9	34.0	- 2.6	41.0	38.4	- 6.3
Haryana	—	38.0	41.6	+ 9.5	27.9	29.0	+ 3.9	36.2	39.5	+ 9.1
Himachal Pradesh	—	33.3	35.7	+ 7.2	24.6	23.2	- 5.7	32.7	34.9	+ 6.7
Jammu and Kashmir	—	35.0	31.8	- 9.1	25.6	19.9	-22.3	33.0	29.2	-11.5
Karnataka	40.1	35.0	29.5	-15.7	27.8	24.3	-12.6	33.0	28.0	-15.1
Kerala	36.9	31.9	26.9	-15.7	30.1	26.4	-12.3	31.6	26.5	-16.1
Madhya Pradesh	40.0	40.7	37.5	- 7.8	32.2	31.5	- 2.2	39.3	36.6	- 6.9
Maharashtra	36.8	32.1	29.1	- 9.3	30.4	28.8	- 5.3	31.5	29.0	- 7.9
Orissa	35.5	38.5	—	—	34.2	—	—	38.1	—	—
Punjab	—	34.7	33.0	- 4.9	30.6	28.2	- 7.8	33.8	32.0	- 5.3
Rajasthan	43.7	39.7	37.8	- 4.8	33.3	29.8	-10.5	38.5	36.3	- 5.7
Tamil Nadu	35.0	32.6	31.3	- 4.0	23.8	24.3	+ 2.1	30.0	29.2	- 2.6
Uttar Pradesh	43.2	46.9	43.3	- 7.7	34.7	32.0	- 7.8	45.4	41.8	- 7.9
West Bengal	30.7	29.9	—	—	21.7	—	—	27.8	—	—
All-India	37.8	38.9	35.9	- 7.7	29.7	28.9	- 2.3	36.8	34.5	- 6.2

-- Not available.



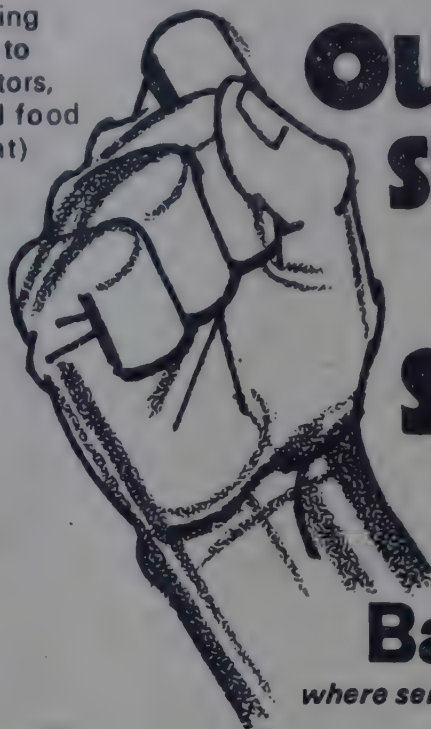
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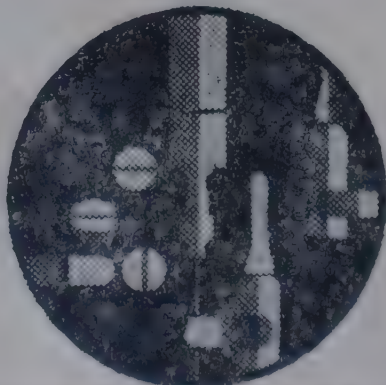
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TABLE 3: BIRTH RATES FOR THE DISTRICTS OF KERALA, 1972-74 (RURAL)

District	1972	1973	1974	Average
Trivandrum	30.37	25.15	25.38	26.97
Quilon	26.04	24.14	22.96	24.38
Alleppey	29.28	27.42	24.10	26.93
Kottayam	25.15	20.06	20.79	22.00
Idukki	33.26	40.80	31.59	35.22
Ernakulam	24.76	23.26	21.28	23.10
Trichur	27.18	26.48	24.31	25.99
Palghat	34.82	34.24	32.61	33.89
Malappuram	39.56	36.33	32.90	36.26
Kozhikode	34.57	30.63	29.72	31.64
Cannanore	36.48	33.85	25.87	32.07
State	32.10	29.90	26.90	29.63

Source: 1972 and 1973: Bureau of Economics and Statistics, Kerala, Sample Registration Scheme, Annual Report, 1973.

1974: R S Kurup, Demographic Research Centre, Bureau of Economics and Statistics, Kerala (SRS unpublished data).

finned only to Kerala but it will be interesting to examine the factors which were responsible for the decline of the birth rate in Karnataka in order to see whether those were the same as or different from those which led to the decline in the birth rate in Kerala.

A comparison of the birth rates for the rural and urban sectors shows only minor variations in the above pattern during the period 1970 to 1974. The largest decline in the rural sector had occurred in Karnataka and Kerala while the largest declines in the urban sector were recorded for Assam including Meghalaya and Jammu and Kashmir. At the same time, the birth rate was lowest in the rural sector of Kerala amongst all the states.

On the basis of the fertility rates obtained by the National Sample Survey, we have also estimated the birth rates in the rural sector for a number of states for the year 1958-59. These estimates indicate that in a large number of states the rural birth rate remained the same or rose during the

period 1958-59 and 1970. Since the National Sample Survey has been generally found to underestimate the vital rates, it may be reasonable to assume that in those states where the birth rate had not shown any decline, it would have remained the same. At the same time, the reported declines in birth rate in some states would be genuine though the extent of the decline might have been under-stated. In any case, it appears that Karnataka, Kerala and Maharashtra had similar order of decline in their birth rate in the rural sector between 1958-59 and 1970.

A comparison of the birth rates for the rural and urban sectors at once indicates that the birth rates were consistently lower in the urban sector of every state. A variety of factors would explain the low birth rates in the urban sector. However, the urban birth rate does not constitute the crux of the population problem in India. Since the bulk of the population in India lives in the rural sector, a significant decline in

overall birth rate would be possible only if the birth rate in the rural sector declined. Since the rural birth rate in Kerala is almost similar to the birth rates obtaining in the urban sectors of many states and also close to its own figure for the urban sector, a detailed enquiry into the factors which brought this about in Kerala could throw some light on the mechanics of birth rate reduction and thus would be of help in formulating appropriate national population policies for reducing the birth rates in other states or in other developing countries. In view of this, the rest of the analysis of this paper is mainly confined to the rural sector of Kerala.

#### DISTRICTWISE DATA ON RURAL BIRTH RATES

The full extent of the decline in birth rate can be gauged only if the rural birth rates for the districts of Kerala are analysed. Table 3 gives the districtwise birth rates in the rural sector for the three years 1972-1974 and the three-year averages. The birth rate was as low as 20 per 1,000 population for Kottayam both in 1973 and in 1974; it was the highest for Palghat and Malappuram districts, close to 33 in 1974. The overall rural birth rate declined from 29.9 in 1973 to 26.9 in 1974.

The data in Table 3 indicate that the districts can be divided into two groups, those in which they are relatively high and those in which they are relatively low. Trivandrum, Quilon, Alleppey, Kottayam, Ernakulam and Trichur form one group and the remaining districts constitute the other group. The estimated birth rate in 1974 for the first group is 23.12 and

TABLE 4: AGE-SPECIFIC MARITAL FERTILITY RATES BY STATES, RURAL SECTOR, 1969

States	Age Groups (Years)						
	15-19	20-24	25-29	30-34	35-39	40-44	45-49
Andhra Pradesh	173.33	251.11	254.29	196.83	149.97	75.44	30.04
Assam	270.76	393.18	336.08	270.68	146.54	66.29	15.83
Gujarat	114.72	327.81	320.98	271.95	173.79	81.25	22.63
Jammu and Kashmir	166.15	272.68	303.80	223.74	177.75	95.65	55.34
Karnataka	164.02	242.18	247.09	204.43	141.84	66.42	25.44
Kerala	185.52	300.47	256.77	202.34	165.82	62.85	12.66
Maharashtra	92.83	232.44	251.07	209.99	147.59	67.06	25.79
Punjab	42.91	257.02	311.19	268.63	195.20	113.17	30.28
Rajasthan	126.84	308.59	308.26	269.34	217.51	127.87	74.08
Tamil Nadu	183.88	270.45	262.96	193.23	122.14	44.18	15.47
Uttar Pradesh	131.99	304.39	302.87	301.50	236.19	147.44	95.54
All-India	139.71	282.87	282.63	246.56	180.85	98.30	49.94

Source: SRS, "Measures of Fertility and Mortality in India".



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TABLE 5: AGE-SPECIFIC FERTILITY RATES, RURAL SECTOR, 1969

State	Age-Group (Years)						
	15-19	20-24	25-29	30-34	35-39	40-44	45-49
Andhra Pradesh	140.21	236.73	237.13	173.49	125.12	54.40	19.20
Assam	146.23	313.05	302.54	251.28	132.90	56.77	12.34
Gujarat	70.88	312.08	309.24	256.02	157.41	66.99	17.35
Haryana	73.73	261.73	301.67	285.20	194.10	124.65	44.83
Jammu and Kashmir	123.75	258.17	290.04	210.43	160.88	78.23	40.07
Karnataka	117.31	225.64	231.10	181.47	117.22	46.81	15.55
Kerala	54.30	217.06	217.95	170.90	135.64	46.55	8.65
Maharashtra	75.24	220.82	237.49	190.82	126.31	50.73	16.93
Punjab	23.84	238.93	303.63	258.24	181.93	98.60	25.00
Rajasthan	109.21	300.44	299.57	252.91	196.28	102.60	53.34
Tamil Nadu	80.63	237.43	244.50	172.03	102.44	32.17	9.97
Uttar Pradesh	113.42	295.47	293.30	285.67	216.33	123.20	74.28
All-India	97.91	261.91	266.92	226.02	158.28	77.06	35.54

Source: SRS, *ibid.*

TABLE 6: AGE-SPECIFIC NUPTIAL RATES FOR STATES, RURAL SECTOR, 1969

State	Age-Group (Years)							Per Cent of Never Married Females* to Total Females in Age-Group 15-44
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
Andhra Pradesh	0.8089	0.9427	0.9325	0.8814	0.8343	0.7211	0.6391	4.7
Assam	0.5408	0.7962	0.9002	0.9283	0.9069	0.8563	0.7795	15.7
Gujarat	0.6178	0.9520	0.9634	0.9414	0.9057	0.8245	0.7667	9.8
Jammu and Kashmir	0.7448	0.9468	0.9547	0.9405	0.9051	0.8179	0.7241	7.0
Karnataka	0.7153	0.9317	0.9352	0.8877	0.8264	0.7048	0.6112	8.2
Kerala	0.2927	0.7224	0.8488	0.8460	0.8180	0.7407	0.6833	22.0
Maharashtra	0.8105	0.9500	0.9459	0.9087	0.8558	0.7566	0.6565	6.7
Punjab	0.5556	0.9296	0.9757	0.9613	0.9320	0.8712	0.8256	12.5
Rajasthan	0.8610	0.9735	0.9718	0.9390	0.9024	0.8024	0.7470	3.4
Tamil Nadu	0.4385	0.8779	0.9298	0.8903	0.8387	0.7282	0.6445	13.2
Uttar Pradesh	0.8593	0.9706	0.9684	0.9475	0.9159	0.8356	0.7775	4.0
All-India	0.7008	0.9259	0.9444	0.9167	0.8752	0.7839	0.7117	7.4

for the latter group is 29.93. The birth rate estimated for the former group has not been so far achieved anywhere in the developing world except Taiwan. But the effort and cost involved in the Taiwanese experiment is so well known that efforts on that scale to bring down the birth rate might not be feasible in many developing countries.<sup>9</sup> It is interesting to observe that the birth rate of 23 was reached in Japan during 1950-55 and that the Japanese birth rate in 1974 was 18.6, only 2 points below that reported for Kottayam district.<sup>10</sup>

It is interesting to note also that the districts in the first group form a contiguous area belonging to the former Native States of Travancore and Cochin, and that the remaining districts (excluding Idukki) formed part of the Malabar district of the Province of Madras under British administration. There is some evidence to believe that the birth rate was much higher in Malabar compared to Travancore-Cochin at the time

of the formation of the Kerala state. The Census Report of 1951 estimated the birth rate at 36.2 for Travancore-Cochin for the decade 1941-50.<sup>11</sup> It also mentions that the birth rate in Travancore was estimated at 34.9 in 1948 in a survey conducted by the Public Health Department.<sup>12</sup> Kerala state was formed in 1956 by integrating Malabar district with the already merged territories of Travancore and Cochin. The birth rate for Kerala was estimated to be 38.9 for the decade 1951-60. On the assumption that the birth rate in Travancore-Cochin was 35 for that period, the overall rate of 38.9 would imply a rate of 45.6 for Malabar.

#### FERTILITY RATES: AN INTER-STATE COMPARISON

Since a decline in the birth rate reflects the changes in the fertility pattern, it is necessary to examine the more sensitive measures of fertility to gain a clearer understanding of the process of

the decline in birth rates. The most commonly used measures for such an analysis are the age-specific general and marital fertility rates. The general fertility rate measures the total number of children born alive for every 1,000 women in a given age-group; the marital fertility rate expresses the number of children born for every 1,000 married women within that age-group. In Tables 4 and 5, we provide the age-specific marital and general fertility rates for the rural sector for a number of states in India.

An examination of the data in Tables 5 and 6 shows wide variations in the fertility rates. The marital fertility rates in the age group 15-19 is the lowest for Punjab followed by Maharashtra. The marital fertility rate for Kerala is one of the highest, its rate being exceeded only by that of Assam. The marital fertility rate of Kerala in other age-groups also does not appear to be lower than in many other states. However, an examination of the age-specific



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TABLE 7: AVERAGE AGE AT EFFECTIVE MARRIAGE BY LEVEL OF EDUCATION OF WIFE AND FEMALE LITERACY RATES, RURAL SECTOR, 1961-62<sup>18</sup>

State	Average Age at Effective Marriage of Women					Female Literacy (1961) (excluding 0-5 ages)
	All	Illiterate	Below Primary School Education	Primary School Education	Middle School Education	
Andhra Pradesh	15.23	15.25	15.03	15.23	15.33	14.0
Assam	16.80	16.78	16.94	16.25	17.89	19.6
Bihar	15.87	15.85	16.62	16.03	15.60	8.2
Gujarat	16.90	16.89	17.04	16.92	16.71	22.8
Jammu and Kashmir	16.00	16.01	14.69	15.59	14.44	5.1
Karnataka	15.23	15.13	16.25	16.53	18.50	16.7
Kerala	18.17	17.68	18.68	18.16	18.28	45.6
Madhya Pradesh	15.79	15.81	15.64	16.50	17.82	8.1
Madras	17.01	16.90	17.81	16.90	17.94	21.1
Maharashtra	15.56	15.56	15.10	15.88	17.19	10.8
Orissa	16.29	16.32	16.17	15.80	14.00	10.1
Punjab	16.86	16.80	17.67	18.15	18.00	20.7
Rajasthan	15.72	15.65	14.96	17.71	—	7.0
Uttar Pradesh	16.24	16.22	17.73	15.20	16.65	8.3
West Bengal	14.72	14.66	15.18	15.12	17.46	20.3
All-India	16.02	15.94	16.85	16.75	17.35	15.3

TABLE 8: AGE-SPECIFIC NUPTIAL RATES IN KERALA, 1941-71

Year	Age-Group (Years)					
	15-19	20-24	25-29	30-34	35-39	40-44
1941 (Travancore only)	0.3632	0.7593	0.8832	0.8781	0.8335	0.7697
1961 (Kerala)	0.2927	0.7324	0.8487	0.8445	0.8180	0.7407
1969 (Rural sector only)	0.2927	0.7224	0.8488	0.8460	0.8180	0.7407
1971 (Rural sector only)	0.1624	0.5924	0.8370	0.8697	0.8421	0.7978

Source: 1941 and 1961: Census Reports for the respective years.  
1969 and 1971: SRS Bulletin.

general fertility rates given in Table 6 tells a different story. While the general fertility is again lowest in Punjab in the age group 15-19, the next lowest rate is in Kerala. In the remaining age-groups, upto the 35-39 age-group, the fertility rate is lowest in Kerala (lower than even Punjab), while Assam, Gujarat, Rajasthan and Uttar Pradesh have reported generally the highest rates.

In fact, the widest divergence between the two sets of fertility rates is in the case of Kerala. Since the divergence between these two rates can be explained only in terms of difference in the marriage rate, it is necessary to examine the latter for the different states. These rates can be estimated for the year 1969 by dividing the age-specific general fertility rate by the corresponding marital fertility rate. The estimates so derived are presented in Table 6. It is clear from these figures why the general fertility rates are lower in Kerala in spite of comparatively high marital fertility rates. The number of females in the age-group 15 to 19 who

were married in 1969 formed a mere 29 per cent in the case of Kerala while it was as high as 86 per cent for Rajasthan and Uttar Pradesh. The percentage of married females was only 72 for Kerala even in the age-group 20-24 as against over 90 for most of the other states. This means that the average age at marriage has been significantly higher in Kerala.

Such difference in nuptiality patterns were conspicuous in Western Europe when the fertility rate declined in different countries in the region:

"The marriage pattern of most of Europe as it existed for at least two centuries upto 1940 was, so far as we can tell, unique or almost unique in the world. There is no known example of a population of a non-European civilisation which has had a similar pattern.

"The distinctive marks of the 'European pattern' are (i) a high age at marriage and (2) a high proportion of people who never marry at all. The 'European' pattern pervaded the whole of Europe except for the Eastern and South-eastern portion."<sup>13</sup>

While it is certainly true that the

Kerala pattern does not completely fall into the 'European pattern', it has similarities and it is quite distinct from the 'all-India' pattern. In the 'Kerala pattern' the percentage of females who never marry is 22 and is highest among all the states in India. Similarly, the proportion of married females in the age-groups 15-19 and 20-24 are also quite different. Therefore, if we are able to find the reasons why the nuptial rates differ in Kerala in these age-groups, then we would have gone a long way in explaining the lower fertility rates for Kerala.

In Table 7, we provide data on average age at effective marriage, the age at effective marriage by levels of education, and the female literacy rates for different states in India. The average age at effective marriage will differ from the average age at marriage, since marriages still take place formally in many parts of India at an early age when they are not in fact consummated. The relevant concept of age at marriage for fertility measurement is that at which it becomes effective since it is beyond that point that co-habitation begins. "In the case of child marriage, though the husband and wife may be living together just after the marriage, the effective marriage was reckoned to start after the attainment of puberty of wife."<sup>14</sup> The relevant information is however available only for 1961-62.

It is seen from Table 8 that the average age at effective marriage of women is over 18 years in Kerala and that it is the highest among the states for which data are available. The age at marriage in India may be determined by numerous factors, partly based on custom and tradition and partly based on economic factors. It appears that one of the important factors that influences the age at effective marriage is the level of education. But, the relationship between the average age at effective marriage and the level of education depicts certain inter-state differences. In almost all the states, however, the average age at marriage markedly increases with education upto the middle school level. In some cases, the curve relating age at effective marriage and levels of education is somewhat J-shaped, declining slightly with literacy or primary school education and then rising sharply with further education.

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TABLE 9: AGE-SPECIFIC FERTILITY RATES IN KERALA (RURAL SECTOR) FOR SELECTED YEARS

Year	Age-Group (Years)							Gross Fertility Rate
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
1958-59	83.3	226.6	277.9	195.2	154.0	44.5	1.45	171.9
1969	54.3	217.1	218.0	170.9	135.7	46.6	8.7	129.2
1971-72 (fertility survey)	36.4	215.1	259.9	200.3	132.3	59.2	11.9	133.8
1972 (SRS)	50.0	210.5	235.6	172.9	117.5	46.2	6.2	126.4
1973 (SRS)	48.3	204.2	218.7	152.0	98.8	38.2	6.0	117.1

Source: 1958-1959: National Sample Survey, Report No 76.  
1969-1973: SRS Bulletins.

to the level of income or occupation. A large proportion of the illiterates would comprise agricultural labour and similar low-earning communities among whom early marriages are probably ruled out due to their economic position. In such communities the average age at effective marriage may be higher. On the other hand, the slightly better-off communities are the ones who initially take to female education and achieve minimum levels of literacy; at the same time, these communities are not so much better-off as to take advantage of higher education. In such communities, there is probably less economic compulsion to postpone marriage as in the case of communities belonging to the illiterate group. These are, however, only conjectures, and detailed enquiries in different parts of the country are needed to determine the factors affecting the age at marriage and its relation with the level of education.

Whatever may be the nature of the relationship between age at marriage and levels of education in different states in India, this relationship is very straightforward and clear in the case of Kerala. The age at effective mar-

riage rises from 17.68 for illiterates to 18.68 for literates (below primary) and stays more or less at that same level till it rises further with secondary education. At secondary level, it is 20.06.<sup>16</sup> If these relationships are valid, then one can explain the decline in birth rates in Kerala as largely due to the change in nuptial rates and the consequent rise in the age at effective marriage brought about by continuous and sharply higher rates of female literacy. Let us examine the available evidence which may help in clarifying further the relationships between levels of education and age at effective marriage in Kerala.

#### CHANGING NUPTIAL PATTERNS AND PROGRESS OF LITERACY IN KERALA

If education leads to an increase in the average age at effective marriage, then one should expect this to rise over time in Kerala, since the rate of literacy and levels of education have been steadily improving in Kerala. The female literacy rate, excluding the population belonging to the 0-4 age group, rose from 12 per cent in 1921 to 45 per cent in 1961. By 1971, the female

literacy rate was over 52.5 per cent in the rural sector. Available evidence indicates that there has also been a steady rise in the average age at effective marriage of women. The average age at effective marriage, which was a little below 15.9 for marriages prior to 1921, rose to 17.5 by 1951 and 18.6 by 1961.<sup>17</sup> We do not have data on average age at marriage for any year after 1961, since data relating to civil conditions from the 1971 Census have not yet become available. However, we have information on fertility rates for a few years covering the period 1941-71, and from these it is possible to derive some conclusions regarding the nature of the changes in the average age at effective marriage.

As mentioned earlier, the rise in age at marriage in Kerala is reflected in the age-specific nuptial rates. We give in Table 8 the age-specific nuptial rates for a few selected years. The nuptial rates for Travancore for 1941 is also given for comparison. The percentage of married in the age-group 15-19 formed 40 per cent of the females in that age-group in 1941 in Travancore. This proportion had fallen to 29 per cent by 1961 and 16 per cent by 1971.

TABLE 10: DISTRICT-WISE BIRTH RATES, NUPTIAL RATES, AVERAGE AGE AT MARRIAGE, FEMALE LITERACY, AND PERCENTAGE OF DISTRIBUTION OF COMMUNITIES BY RELIGION

	Birth Rate		Nuptial Rate		Average Age at Marriage (females)	Female Literacy (Per Cent)		Percentage of Major Religious Communities in Total Population in 1971		
	1970-71	1974	15-19	20-24		1961	1971	Hindus	Muslims	Christians
Trivandrum	25.20	25.38	0.2339	0.7091	20.59	43.9	54.21	71.71	12.01	17.26
Quilon	27.41	23.96	0.2197	0.7326	20.18	51.0	56.47	63.65	12.83	23.51
Alleppey	26.27	24.10	0.1538	0.6550	21.30	57.9	65.78	65.50	6.85	27.64
Kottayam	29.38	20.29	0.1998	0.7432	20.64	59.6	62.71	48.63	4.43	46.93
Idukki	—	31.59	—	—	—	—	—	—	—	—
Ernakulam	26.30	21.28	0.1727	0.6825	21.18	50.9	58.47	46.01	12.33	41.54
Trichur	33.01	24.31	0.1906	0.6560	21.49	49.4	56.06	61.11	13.69	25.15
Palghat	33.52	32.61	0.4268	0.7733	19.08	31.0	36.97	76.03	21.27	2.70
Malappuram	40.48	32.90	—	—	—	—	40.18	34.08	63.93	1.99
Kozhikode	34.38	29.72	0.4895	0.8175	18.28	35.5	46.29	62.14	30.62	7.15
Cannanore	33.36	25.87	0.4588	0.7754	18.59	36.2	45.47	66.23	24.34	9.40



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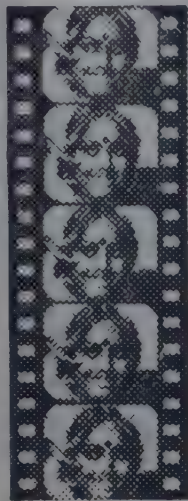
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TABLE 11: AGE-SPECIFIC MARITAL FERTILITY RATES BY LITERACY, 1971-72, RURAL SECTOR, KERALA

Literacy Level	Age-Group (Years)						
	15-19	20-24	25-29	30-34	35-39	40-44	45-49
Illiterate	207.0	390.5	317.7	245.1	176.4	81.4	19.4
Literate below matric	229.8	354.1	303.9	219.0	136.9	63.8	9.3
Matric and above	268.5	293.7	333.3	198.4	142.2	74.7	0.0

Source: Private communication from the Registrar-General's office.

The decline in the age-group 20 to 24 was from 76 per cent to 59 per cent. The extent of the decline would have been probably greater if the nuptial rates were calculated for Kerala as a whole in 1941, since the average age at marriage appears to have been lower in Malabar.

These changes in the nuptial rates are naturally reflected in the fertility rates. In Table 9, we provide the data on age-specific fertility rates and the gross fertility rate for a few selected years. The gross fertility rate declined from about 172 in 1958-59 to 117 in 1973. A similar decline is noticeable in the age-specific fertility rate also. The age-specific nuptial rates indicate that they have virtually remained the same between 1961 and 1969. It is true that, while the 1961 rates are for the whole population of Kerala, the rates for 1969 refer to only the population in the rural sector. But this is unlikely to make much difference, since the rural-urban differences are relatively small in the case of Kerala. If this is correct, the decline in the gross fertility rate must have occurred as a result of change in the marital fertility rates.

It will be observed that the age-specific fertility rates for 1972 and 1973 seem consistent with the figures for 1969. However, the rates estimated from the data collected through the 1971-72 Fertility Survey appear somewhat out of line. The marital fertility rates appear to have risen in 1972-73 compared to 1969 reflected in a slight increase in the gross fertility rate. At the same time, the nuptial rates seem to have declined drastically in the age-groups 15-19 and 20-24 in 1971-72 compared to 1969. They are not necessarily inconsistent, but these findings do need careful examination. Possibly the 1971 Census data may provide another check on the marital rates prevailing in that year.

Leaving this problem aside, the age-specific fertility rates for 1973 appear to be consistent with what is happening in Kerala. Even if the percentage

of married females in the age-group 15-19 remain the same in 1973 as in 1961, it is possible for the fertility rate to decline because of a rise in the age at effective marriage. An increase in the average age at effective marriage will reduce the number of births taking place within that age-group, mainly for the reason that only a smaller proportion of the married couple will have the necessary minimum period required for conception and delivery within that period. This factor alone may explain the decline in the fertility rate for the age group 15-19. It is interesting to note that the decline in the fertility rate is the lowest for the age-group 20-24. There are also marked reductions in the fertility rates for females above the age of 24. Since there are no changes in the marital rates, these reductions must be attributed to genuine reductions in fertility.

It will be interesting to find out how much of the reductions in fertility have been due to overt and specific family planning measures as such and how

much due to the acceptance of a lower birth rate as part of a social adjustment consequent on the higher standards of education and health. On the basis of calculations of births averted by various methods of family planning, the projected birth rate for Kerala was 30 for 1974,<sup>18</sup> whereas the estimated birth rate for the year by the SRS is 26.5. If this is any indication, then the number of persons practising 'non-programme' methods of family planning must be quite significant. The awareness of and the need for family planning among a much larger segment of the population than has been covered by the official programme cannot but be the effect of higher levels of literacy and education in Kerala.

Just as education appears to play an important role in reducing the fertility rates, lower mortality rates and longer life expectation could also be significant factors in reducing birth rates. Given the desired number of surviving children the higher the infant and child mortality rates the larger is likely to be the number of children born to a couple on the average. Therefore, with reduction in mortality rates, the birth rate may also decline. It is difficult to isolate the contribution of each of these different factors in reducing the birth rate in Kerala. But it is important to note that infant and child mortality rates are the lowest in Kerala among all the states in India.

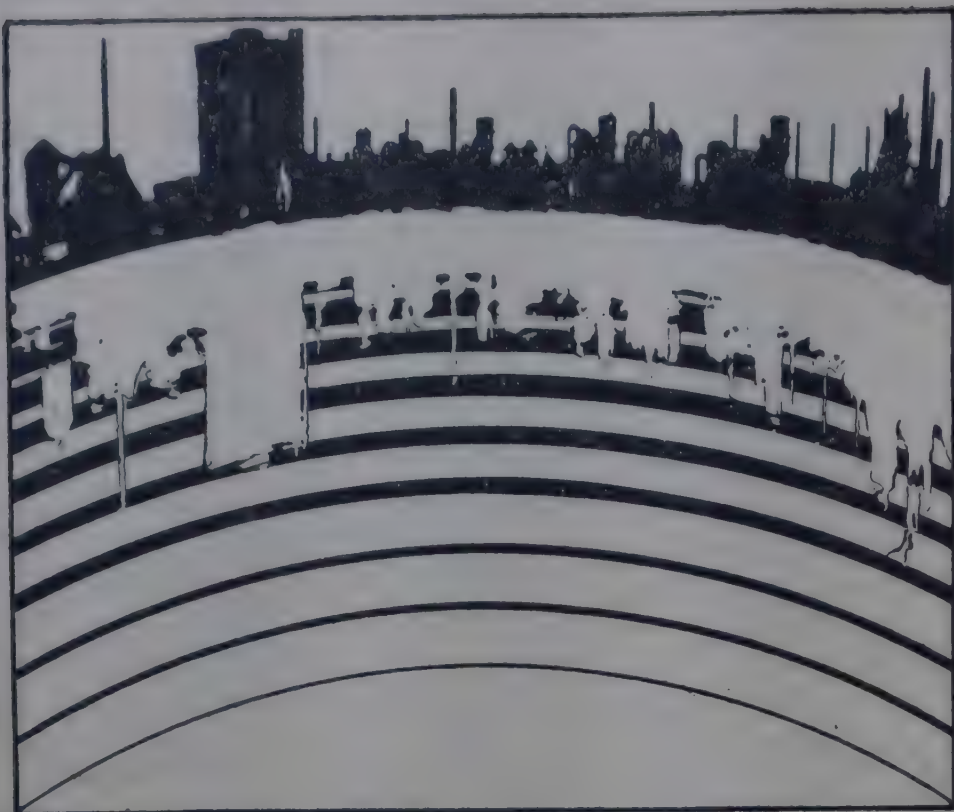
TABLE 12: DEATH AND INFANT MORTALITY RATES BY STATES

State	Crude Death Rate (1974)		Infant Mortality Rate (1970)	
	Rural	Urban	Rural	Urban
Andhra Pradesh	16.4	10.0	122.2	79.1
Assam (including Meghalaya)	17.5	9.5	138.4	78.0
Bihar	NA	NA	106.1	75.4
Gujarat	14.0	10.3	159.2	131.0
Haryana	13.4	8.4	82.1	61.4
Himachal Pradesh	12.6	7.2	151.3	75.5
Jammu and Kashmir	11.3	4.8	93.0	45.0
Karnataka	12.4	7.0	101.0	73.2
Kerala	8.0	6.8	55.9	39.7
Madhya Pradesh	16.9	9.4	151.7	113.2
Maharashtra	12.6	9.0	102.5	84.3
Orissa	NA	NA	139.8	103.3
Punjab	11.3	8.1	103.7	86.5
Rajasthan	15.8	7.7	148.5	104.5
Tamil Nadu	16.1	8.7	133.9	89.9
Uttar Pradesh	20.6	12.0	165.4	110.2
West Bengal	NA	NA	113.4	61.0
India*	15.8	9.1	136.4	89.9

\* Provisional

Source: Registrar-General, *Sample Registration Bulletin*, Vol IX, No 4, October, 1975





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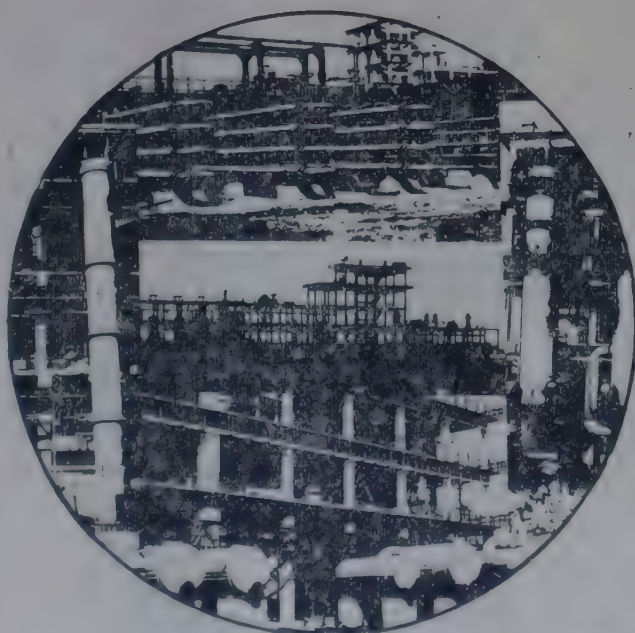
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AGE AT MARRIAGE AND INTER-DISTRICT  
VARIATIONS IN BIRTH RATES

The data given earlier show that the birth rate in the districts of Kerala varies from 21 for Kottayam and Ernakulam to 33 for Palghat and Malappuram. In the earlier analysis, we attributed the reduction in the birth rate in Kerala to lower nuptial rates in the age group 15-24, an increase in the average age at effective marriage, and improvements in the levels of education and of health. If this hypothesis is correct, then the same factors should be able to explain the variations in the districtwise birth rates also.

Our analysis of the birth rates has shown that they are higher in the northern districts compared to the southern districts. It would have been interesting to compare the fertility patterns prevailing in the different districts of Kerala, but fertility rates at the district level have not been estimated.<sup>19</sup> However, from the census of 1961, it is possible to derive the nuptial rates for different age-groups for the districts of Kerala. Since birth rates have declined significantly in the districts, it would have been useful to compare the nuptial rates for 1961 with those of 1971, but, again, the 1971 census estimates are yet to be published. Though, data on the average age at effective marriage are not available, the difference from the average age at marriage may not be very significant in Kerala, since child marriages are rather uncommon in this state. The available data on the birth rate, the nuptial rate, and the average age at marriage, together with the female literacy rates in 1961 and 1971, are given in Table 10.

A comparison of the birth rates in 1974 with those prevailing in 1970-71 shows a remarkable degree of decline in birth rates in most of the districts. In 1970-71, the estimated average birth rate for the first seven districts (which formed part of Travancore-Cochin) was 26.9, while the average for the remaining districts worked out to 34.8. Though the birth rate for both groups has declined since then the gap between the two groups of districts persisted in 1974.

It is worth comparing the birth rates with the nuptial rates, the average age at marriage, and the female literacy rate. It will be seen that the nuptial rate is about 20 per cent for the age group 15-19 in the southern districts

TABLE 13 : POPULATION PER HOSPITAL, BED/POPULATION RATIO, PER CAPITA EXPENDITURE ON HEALTH AND POPULATION TREATED IN HOSPITAL FOR STATES

State	Population Served by		No of Beds Per 100,000 Population (1968)	Per Capita Expendi- ture on Health 1973-74 (Rupees)	Popula- tion Treated as Percentage of Total Population 1968
	Hospitals	Dispensa- ries (1965)			
Andhra Pradesh	106,541	51,448	65.61	7.30	NA
Assam	174,682	18,578	43.29	6.42	NA
Bihar	326,622	72,022	37.34	3.38	NA
Gujarat	196,588	17,145	54.28	9.27	34.10
Haryana	NA	NA	53.20	NA	30.19
Jammu and Kashmir	151,232	7,546	94.88	15.90	NA
Karnataka	146,411	39,971	87.01	8.90	NA
Kerala	186,371	92,272	84.81	9.87	114.94
Madhya Pradesh	243,426	95,310	38.55	7.69	19.97
Maharashtra	113,854	44,531	80.65	11.88	NA
Orissa	105,473	63,913	48.45	6.87	51.96
Punjab	129,453	49,407	78.82	13.85	38.19
Rajasthan	58,961	75,807	66.25	9.67	53.32
Tamil Nadu	113,470	55,069	49.26	NA	NA
Uttar Pradesh	98,258	243,727	36.92	5.31	NA
West Bengal	148,065	75,895	88.79	8.97	26.55

Source : Government of India, Ministry of Health, Health Statistics in India, 1965, Central Statistical Organisation, Statistical Abstract of India, 1970, Kerala Government, Economic Review, 1975.

whereas it is over 45 per cent for the northern districts. This is naturally reflected in the average age at marriage. The average age at marriage is lower in the northern districts where the female literacy rate is also lower. Since the proportion of Muslim population is larger in the districts, one may be tempted to attribute the higher birth rates to the fact that the age at effective marriage was lower for Muslims. However, the indications are that this is also due to the low educational levels of Muslim women residing in the northern parts of Kerala.

Estimates of community-wise birth rates show that it is highest for Muslims and is about the same for both Hindus and Christians.<sup>20</sup> But the birth rate in Malappuram district is much lower than the estimated birth rate for Muslims. On the other hand, the birth rate in Palghat considerably exceeds the estimated birth rate for Hindus who constitute the bulk of the population in that district. Kottayam and Ernakulam districts which have the highest proportion of Christians professing the Catholic faith reported the lowest birth rates among all the districts in Kerala. While Palghat and Malappuram have similar low levels of female literacy, Kottayam and Ernakulam have similar high levels of fe-

male literacy. Thus, it appears that the religious factor in birth rate reduction is unlikely to be a major obstacle. The recent changes in birth rate in Jammu and Kashmir also point in the same direction.

Thus, it appears that the same factors which explain the decline of the overall birth rate in Kerala can also explain the inter-district variations in birth rates. We have attempted a multiple regression with a number of variables to explain the inter-district variations in birth rates.

Let,

$B_i^1$  = Birth rates, average of 1972, 1973 and 1974.

$B_i^2$  = Birth rate, 1974.

$P_i$  = Nuptial rate for the age-group 15-19.

$M_i$  = Mortality rate, average of 1972, 1973 and 1974.

$L_i$  = Female literacy rate, 1971.

$Y_i$  = Per capita output (1969)

$i$  = district.

The results are:

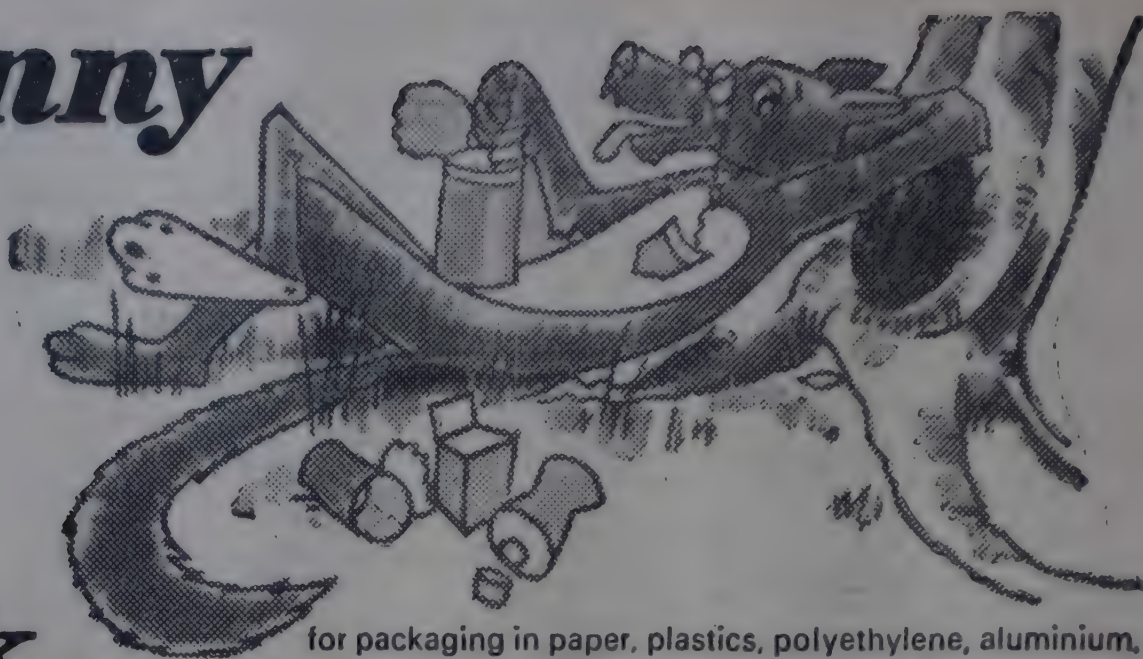
$$(1) B_i^1 = 12.0212 + 17.7864P_i + 1.2214M_i \\ (3.8121) \quad (0.2879)$$

$$R^2 = 0.9413$$

$$F = 69.06$$



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TABLE 14 : PERCENTAGE OF TOTAL BIRTHS AND DEATHS TAKING PLACE IN HOSPITALS, MATERNITY HOUSES AND OTHER MEDICAL INSTITUTIONS, 1964-65

State	Urban Sector		Rural Sector	
	Births	Deaths	Births	Deaths
Andhra Pradesh	27.60	13.62	4.03	4.88
Assam	24.55	10.10	1.98	NA
Bihar	11.85	7.78	1.46	0.82
Gujarat	29.48	8.64	2.12	1.09
Haryana	5.00	NA	1.41	—
Jammu and Kashmir	4.16	2.86	0.62	1.55
Kerala	31.95	25.80	12.91	7.69
Madhya Pradesh	22.88	13.17	0.68	1.72
Madras	47.22	14.94	9.08	5.89
Maharashtra	46.94	17.11	5.09	2.26
Mysore	32.75	14.87	5.06	3.64
Orissa	15.94	9.59	1.82	1.82
Punjab	3.64	3.31	1.04	1.73
Rajasthan	15.17	7.60	0.54	2.17
Uttar Pradesh	13.12	15.41	0.48	1.24
West Bengal	49.83	13.42	5.88	3.32
All-India	29.96	11.76	2.96	2.27

Source : NSS Report No 177, Nineteenth Round, 1964-65, pp 83-93.

$$(2) B_i^2 = 9.4243 + 19.1095 P_i + 1.7574 M_i \\ (4.8896) + (0.2520) \\ + 0.0506 L_i - 0.0090 Y_i \\ (0.0963) \quad (0.0033) \\ R^2 = 0.9857 \\ F = 48.18$$

$$(3) B_i^2 = 10.2254 + 17.0356 P_i + 1.2412 M_i \\ (3.1190) \quad (0.2067) \\ R^2 = 0.9715 \\ F = 85.51$$

$$(4) B_i^2 = 14.5632 + 15.5790 P_i + 1.4438 M_i \\ (4.7359) \quad (0.2383) \\ - 0.0371 L_i - 0.0064 Y_i \\ (0.0909) \quad (0.0032) \\ R^2 = 0.9885 \\ F = 64.76$$

The above results show that the most important factors which explain the inter-district variations in birth rate in Kerala are nuptiality and crude death rates. It is quite likely that infant mortality rate would have provided an equally good explanation instead of the death rate. But the district-wise infant mortality rates were not available. It is seen that birth rate will be larger with higher rates of nuptiality as well as of deaths.

While birth rate is inversely related to per capita income, the importance of income appears to be marginal in explaining the district-wise birth rates. However, the lack of significance of the female literacy rate indicates that the relationship between birth rate and levels of education are probably more indirect than direct. This also seems to be the conclusion that emerges from

the data in Table 11 where the age specific marital fertility rates by literacy is given.

In the light of the above findings, one needs to exercise considerable caution in attributing the increase in the average age at effective marriage in Kerala solely to female education. The age at effective marriage would have gone up as a result of the operation of a number of other factors also. We shall examine these factors in the concluding section when we attempt to draw the relevance of the Kerala experience for other regions or countries.

## II

The demographic transition in a country involves not only reduction in birth rates but also significant lowering of the mortality rates. Reductions in mortality rates generally precede decline in birth rates, but one of the main unresolved questions in population dynamics is about the magnitude of the time-lag involved in this phenomenon. An examination of the data on crude death rates in Kerala indicates that it had begun to decline much earlier than the decline in the birth rate. The crude death rate in Kerala declined from 16.9 during 1951-60 to 11 in 1966. The infant mortality rate in the rural sector was 66.0 in 1968 compared to 153 during 1941-50. In this section, we shall attempt an analysis of the factors which helped Kerala to reduce the mortality rates.

## INTER-STATE DIFFERENCES IN MORTALITY RATES

An examination of the crude death and infant mortality rates in the rural and urban sectors of different states in India, presented in Table 12, shows the comparative position of Kerala. The crude death rate is 7.9 for the state as a whole, and 8.0 and 6.8 in the rural and urban sectors respectively, in 1973. It will also be noticed that the rural-urban differences in the death rate are smaller in Kerala than in all the states. Similarly, it is seen that the infant mortality is also the lowest in Kerala among the various states.

While the death rate in Kerala is similar to the rates prevailing in developed countries, it is necessary for a stricter comparison to standardise the death rate with reference to age-group.

The low levels of mortality rates in Kerala compared to other states in India cannot be explained either by the level of nutritional intake or by per capita state income. A state-wise comparison of the data on mortality rates with calorie intake or per capita state income does not support the hypothesis that it would be strongly correlated with either of them.<sup>21</sup> The evidence we give below indicates that probably the major factor which brought about the decline in mortality rates in Kerala was the expansion and spread of health facilities.

## UTILISATION OF MEDICAL CARE

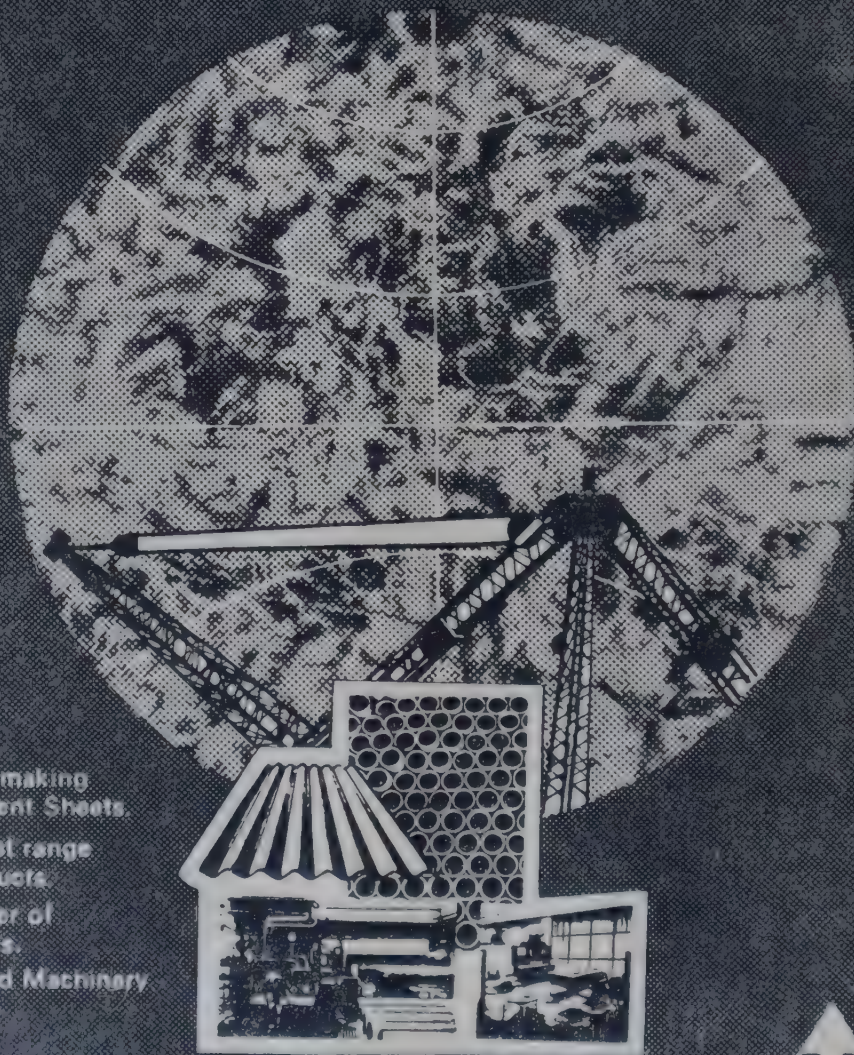
The total number of persons treated in hospitals, primary health centres and dispensaries in Kerala was 21.6 million in 1970. The total population of the state in 1970 was about 21 million in that year, which implies that on average the number of visits made to the institution listed above was approximately 1 per annum. In addition, 2.4 million persons were treated in ayurvedic hospitals and dispensaries, and an unknown number in private clinics. The number of hospital beds per 100,000 population increased from 77 in 1960-61 to 105 in 1974-75.

Though, one could relate the decline in the death rate to the expansion in medical care facilities, it appears that the relationship need not be so simple and direct. Table 13 provides information on factors relating to the availability of medical care



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in a number of states. These data bring out certain striking differences between Kerala and other states regarding the availability and utilisation of medical care facilities. This is brought out sharply by the differences in the pattern and development of medical facilities as represented by West Bengal and Kerala. The number of beds per 100,000 population, and the per capita expenditure on health, are almost identical in both cases. Moreover, a hospital/dispensary appears to cover on the average a smaller population in West Bengal than in Kerala. However, a comparison of the proportion of the population which annually received treatment in hospitals and dispensaries in the two states indicates that the utilisation ratio in Kerala (i.e., the number treated in hospitals as a percentage of total population) was over four times that of West Bengal. It appears that Kerala has the highest utilisation ratio of all states in India.

The factors responsible for such differences in the utilisation ratio of medical facilities have not been studied, but apparently an important reason appears to be the spatial allocation of such facilities. The lower utilisation ratio in most of the states is probably accounted for by the fact that medical care facilities are largely located in urban areas while this is not so in Kerala. This is borne out by the data given in Table 14. The percentage of total number of births and deaths taking place in a medical institution is certainly higher for the urban sector of all states, but, even within this sector, these vary considerably. In the urban sector, Kerala reports the highest proportion of deaths taking place in a medical institution. Similarly, the data for the rural sector unmistakably show that the percentage of births as well as deaths taking place in medical institutions is highest for Kerala among the various states in India. An important factor affecting infant mortality and maternal death are deliveries unattended by trained personnel and the non-availability of medical help in complicated cases. Deaths arising from such situations can be considerably reduced if births take place in medical institutions. Similarly, the large proportion of deaths occurring in medical institutions indicates that more persons are being treated in hospitals for various illnesses. The fact that a higher proportion of persons get treated

TABLE 15 : ACCESSIBILITY AND UTILISATION OF MEDICAL CARE AND MORTALITY RATES IN THE NATURAL REGIONS OF KERALA

	Low Land	Mid Land	High Land
Number of beds per 100,000 population (1970-71)	142.0	87.0	46.0
Average area covered by medical centres (square kilometres)	29.4	65.4	101.9
Percentage of cases availing medical facilities before death (rural sector 1973)	80.0	72.0	53.0
Percentage of deliveries availing of medical assistance (rural sector, 1973)	59.0	44.0	36.0
Death rate per 1,000 population (rural, 1973)	8.8	8.5	9.3
Infant deaths per 1,000 live births (rural, 1973)	46.6	46.9	78.0

in hospitals should itself have a beneficial effect on the overall death rate.

The above findings seem to indicate that accessibility is an important factor in determining the degree of utilisation of medical care.<sup>22</sup> The utilisation has been much higher in the urban sector of all states, which appears to be closely related to the spatial allocation of such facilities. It appears that the higher utilisation ratio in Kerala is largely due to the geographical spread of medical facilities in Kerala.<sup>23</sup>

That accessibility is an important factor is also brought out clearly by data on the distribution of hospitals and the percentage availing medical facilities before death and for child-birth. Kerala is often divided into three natural regions, viz, the coastal lowland, the midland with slightly higher elevation, and the hilly (even mountainous) highland. From Table 15 it will be seen that the lowland region which has also the highest population density, is characterised by the highest number of beds per 100,000 of the population and the smallest average area to be covered by a hospital (or dispensary). On the other hand, in the highland region, which has the lowest population density among the three natural regions, the number of beds per 100,000 population is the lowest and the area covered is largest. The midland region falls in between in all these respects. An examination of the crude death and infant mortality rates show that they are highly correlated to these variables. The number of deaths per 1,000 population, as well as of infant deaths per 1,000 live births, appear to be smaller in the lowland and very much more in the highland. The rates of midland lie in between.

While accessibility to medical care does not appear to affect significantly the percentage of total deaths availing medical facilities before death, it does seem to be an important factor in the case of child-birth. The percentage of child-birth with medical assistance was 60 per cent in the lowland region but it declined to 37 per cent for the highland region. Even in the midland region only 41 per cent of the deliveries took place with medical assistance. It appears from the data given in the Table that there is a sharp decline in the number of child-births under medical supervision with increase in the average distance of the medical centre from the home. It is also seen that the infant death rates are closely related to the percentage of deliveries taking place under medical supervision. These facts clearly demonstrate that accessibility to the medical care system is one of the important variables determining the level of mortality rates in a region or a state.

### III

The population of Kerala increased at an annual average rate of 2.6 per cent during the decade 1961-70. In 1966, when the SRS first came into operation in Kerala, the estimated natural growth rate in the rural sector was 2.7 per cent per annum. There was a steady decline in the estimated natural growth rate in the rural sector since then and it was only 1.9 per cent in 1974. The estimated natural growth rate for Kottayam district, which reported the lowest birth rate in the rural sector amongst the districts of Kerala in 1974 was only 1.38 per cent. The natural growth rate for the southern districts, which account for 63 per cent of the



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total rural population of Kerala, was only 1.6 per cent in 1974. Therefore, a one per cent rate of natural growth of population in Kerala appears to be achievable within the next quinquennium.

What lessons does the Kerala experience offer to other states in regard to population control? The above analysis has identified four elements which could have contributed to the decline of the birth rate in Kerala. These are the nuptial rates, the mortality rates, per capita income and voluntary limitations of the family size by practising 'programme' and 'non-programme' methods of family planning. While it has not been possible to estimate the precise contribution of each factor to the reduction in birth rates in Kerala, the analysis of the inter-district data has unequivocally demonstrated the role of nuptiality and mortality rates in reducing the birth rates. While we found the contribution of per capita income to the reduction in birth rate to be marginal, we have not analysed the contribution of family planning in reducing the fertility rates at all.

Since the major causes of reduction in birth rate in Kerala are a rise in the average age at effective marriage (brought about by changes in nuptiality rates) and the decline in the mortality rates, it is important to identify correctly how these changes took place. We attributed the rise in average age at effective marriage to improvements in the levels of female education in Kerala. It is necessary to undertake field investigations to prove that it is so. It may also be possible that the rise in the female age at marriage is consequent upon a rise in the average age at marriage of males.<sup>24</sup> The average age at effective marriage of males has also been rising partly as a result of improvements in their levels of education. At the same time, improvements in the education of males has increased the number of job-seekers outside of the traditional occupations and the system of self-employment. There are some indications that the waiting period for employment has been lengthening through time.<sup>25</sup>

In the last three or four decades, Kerala has brought about a number of social and economic reforms which have altered the traditional relations in family and in land ownership. These changes have given rise to the emergence of unitary families in Kerala in place of

the traditional joint families.

A lengthening of the waiting period combined with these changes might have contributed to the increase in the average age at marriage of males. This, in turn, might also result in a rise in the average age at marriage of females. These relationships need further investigations and until it is undertaken, the relationship between age at marriage and education needs to be interpreted cautiously especially in the case of Kerala.

The second important factor affecting birth rate was mortality rate. We had earlier hypothesised that given the desired number of *surviving* children, the higher the infant and child mortality rates the larger was likely to be the number of children born to a couple on the average. This hypothesis may need modification when applied to most parts of the rest of India. The Hindu religion attaches considerable importance to the survival of a male child. Therefore, for any given desired number of *surviving male* children, with the same infant and child mortality, the larger would have to be the number of children born to a couple on average. Due to the prevalence of the matriarchal system, a large segment of the Kerala population were indifferent between the sexes of the children born and even in other communities, the preference for male children has probably declined due to female education and the possibility of securing jobs for females in Kerala. But this may not apply to the rest of India. Therefore, limiting the number of children a couple may have while ignoring these factors can only lead to confusion and hardship.

When discussing the relevance of Kerala experience for other states in India, it is also important to examine the case of Karnataka. We mentioned earlier that the decline in the rural birth rate of Karnataka between 1970 and 1974 was of the same order as in Kerala. An examination of the nuptial rates, marital fertility rates and general fertility rates for the year 1969 does not indicate that these are quite different from the all-India pattern. The mortality rates also appear to be higher for Karnataka than for Kerala. There is no indication that the rural birth rate could fall so drastically between 1970 and 1974. These make it all the more important that a study is undertaken to find out how the decline took

place in Karnataka. The same applies to Jammu and Kashmir. The rural birth rate in Jammu and Kashmir suddenly declined from 39.5 in 1969 to 35.0 in 1970 and it has declined further by 1974. These declines in the birth rate indicate that there are numerous factors which can bring about a reduction in birth rate and we are yet to unravel them.

### Notes

[I am extremely grateful to K N Raj who suggested a number of improvements to the draft of this paper. I am also thankful to N Krishnaji for his suggestions, to P R Gopinathan Nair with whom I discussed a number of questions and to R S Kurup of the Demographic Research Centre, Bureau of Economics and Statistics, Kerala, for providing me the corrected estimates for 1974. I am also indebted to M Purushothaman Nair who helped me in the computations.]

- 1 See, Mahmood Mamdani, "The Myth of Population Control", Monthly Review Press, New York, 1972.
- 2 P R Gopinathan Nair, "Decline in Birth Rate in Kerala", *Economic and Political Weekly*, Annual Number, February 1974.
- 3 Registrar-General, Ministry of Home Affairs, Government of India, *Sample Registration Bulletin*, Vol IX No 4, October 1975. For Kerala, the Demographic Research Centre, Bureau of Economics and Statistics, Kerala.
- 4 It is necessary to point out that the district estimates are based on small sample sizes and, therefore, are likely to contain larger sampling errors.
- 5 Japan: United Nations, "Population and Vital Statistics Report" series, Vol XXVIII, No 1. Taiwan: Europe Publications, "The Far East and Australia Yearbook 1973", p 933.
- 6 *SRS Bulletin*, 'About SRS', Vol VII, No 1, Jan-March 1973.
- 7 This is contrary to the finding put forward in the paper by P R Gopinathan Nair, *op cit*. We have not gone into this question in this paper. We are planning a historical study of the growth of population in Kerala covering a much longer period.
- 8 The National Sample Survey, "Fertility and Mortality Rates in India", Number 76, 1963. The general fertility rate is estimated in this report for the age-group 15-44. We estimated the birth rate by first dividing the general fertility rate by the proportion of females in the age-group 15-44 in total female population and then multiplying this figure by the population of total females in total population.
- 9 See the articles on Taiwanese fami-



TABLE A

- ly planning which have appeared in *Population Studies*, A Journal of Demography, London.
- 10 United Nations, *op cit*.
- 11 Census of India, Travancore Cochin, Vol XIII Part 1A, Report, p 21.
- 12 *Ibid*.
- 13 J Hajnal, "European Marriage Patterns in Perspective" in "Population in History", Edited by D V Glass and D E C Eversley, Edward Arnold, 1965, p 101.
- 14 National Sample Survey, "Tables with Notes on Couple Fertility" Number 154. 'Seventeenth Round, 1961-62.
- 15 National Sample Survey, *ibid*.
- 16 National Sample Survey, *ibid*.
- 17 National Sample Survey, *ibid*.
- 18 R S Kurup, P S Gopinathan Nair and K Divakaran Pillai, "Fact Book on Population and Family Planning", Demographic Research Centre, Bureau of Economics and Statistics, Kerala, 1974, Table 12.2, p 79.
- 19 The Centre for Development Studies, has just received the primary data on Kerala of the 1971-72 Fertility Survey undertaken by the

Average Catchment area (square Kilometric per medical centre within a taluk)

No of Taluks

Percentage of Total Population

Less than 50  
50-100  
More than 100

28  
13  
15

51.97  
24.81  
23.22

- Vital Statistics Division of the Office of the Registrar-General, Government of India. It is hoped that the analysis of this data will enable the estimation of fertility rates for the districts and also of the relationships between fertility and a number of other variables.
- 20 The community-wise birth rates in the rural sector in 1974 are as follows: Muslims 38.41, Hindus 26.97, and Christians 26.53. Source S R Report No 10, Bureau of Economics and Statistics, Kerala.
- 21 See, Centre for Development Studies, "Poverty, Unemployment and Development Policy: A Case Study of Selected Issues with Reference to Kerala", United Nations, New York, 1975. Especially Chapter X

- "Health Indicators and Demographic Trends".
- 22 It is necessary to point out that this view is disputed. See, P G Panikar, "Fall in Fertility Rate in Kerala", *Economic and Political Weekly*, Vol X, No 457, November 22, 1975.
- 23 See, Centre for Development Studies, *op cit*. Table A is reproduced from this study.
- 24 R S Kurup, *et al*, *op cit*, Table 5, p 30. The average age at marriage of males rose from 23.31 years in the decade 1921-30 to 26.33 years for the decade 1951-60.
- 25 Centre for Development Studies *op cit*. See Chapter IX, "Structure of Education and the Market for the Educated".

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# Age of Marriage of Women and Population Growth

## The Kerala Experience

Leela Gulati

*In Kerala increase in the age of marriage by itself did not bring down the number of children a woman had. It was the reduction in infant mortality, due partly to the shift in the age of marriage but largely to improvement in medical and public health facilities, which improved the child survival rate and this in turn seems to have influenced the number of children a woman wanted to have.*

*What Kerala really shows to the rest of India is the need to combine all these factors and, of course, female education. It also cautions us against relying only on raising the age of marriage to reduce the rate of growth of population because, going by Kerala's experience, higher age of marriage alone might well lead to higher rates of growth of population, at least in the immediate future.*

### INTRODUCTION

THE New Population Policy (NPP) announced by the Central Government proposes to raise the age of marriage for girls from 15 to 18 and for boys from 18 to 21. This is part of a series of measures proposed to bring down the rate of population growth to 1.4 per cent by 1984. It is well known that population growth depends primarily on two factors, fertility and mortality, and fertility in its turn depends considerably on the age at which women marry. The higher the age of marriage the shorter is their reproductive period. So obviously, the main purpose of this upward revision of the female age of marriage is to reduce fertility by providing for a shorter reproductive period.

Given this objective, it would be instructive to look closely at Kerala's experience with the female age of marriage and its effect on fertility. Not only has the female age of marriage in Kerala been higher than the all-India average in the last one hundred years or so, but the state has had the highest age of marriage in the country. As can be seen from Table 1, the mean age of marriage of women in Kerala was 17.13 for the decade 1901-10, when the corresponding all-India figure was 13.2; and now while the all-India mean age is close to 17 Kerala's age is close to 20.

### SARDA ACT

The Child Marriage Restraint Act, also known as Sarda Act after its original mover, was the first piece of legislation on the minimum age of marriage for girls. It was passed on September 28, 1929, and fixed the minimum marriage age of girls at 14 years. (This was raised to 15 in 1955.) In the 1920s the mean age of female marriage was

13.87 years. Today, the mean age of marriage of girls in India is 17.2 years and it is now proposed to raise it to 18 years. There is thus some similarity between what is now being proposed and what was proposed in 1929 since the current mean age of marriage for girls is not far below the minimum age proposed for enactment. However the major purpose of raising the minimum age of marriage of girls in 1929 was to prevent child marriages which were then quite common. At that period as many as 93 out of 1000 girls between the ages of 5 and 10 years, and 399 out of 1000 girls between the ages of 10 and 15 were married. The purpose of fixing, by legislation, the minimum age of marriage of females to 14 years was to combat two evils: (a) to prevent the evils of premature childbirth and (b) to prevent the high incidence of child widowhood.<sup>1</sup> According to the 1921 Census, there were 175 widows in every 1000 females; of these 148 were below 15.

### MARUMAKKATHAYAM SYSTEM

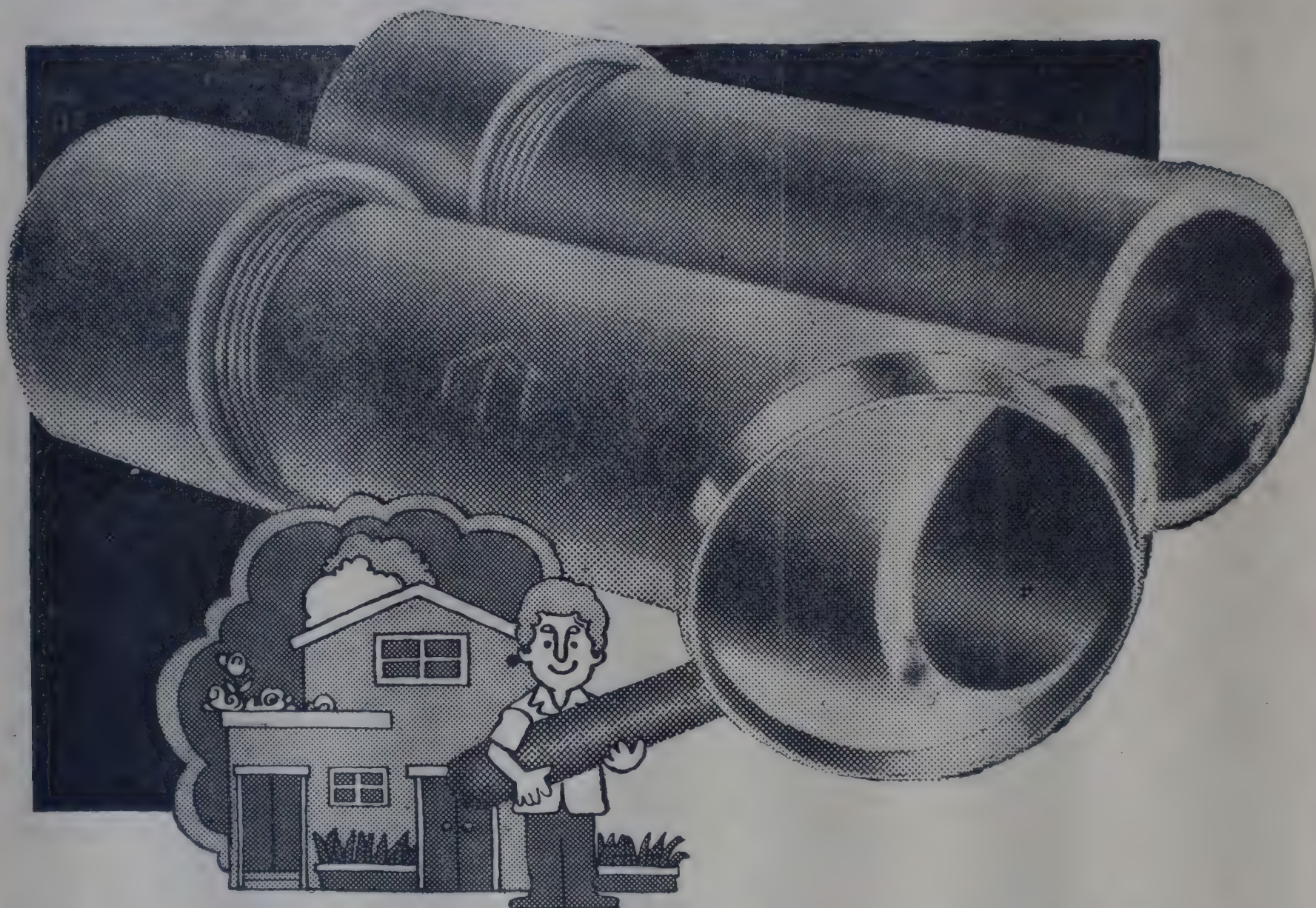
In Kerala, the age of marriage for girls has been comparatively higher without any legislation specifically designed for that purpose.<sup>2</sup> This has come about mainly because of certain clearly identifiable social and cultural factors. It appears that unlike in the rest of India, in Kerala the pressure to subscribe to the sastric law enjoining early and universal marriage was never very strong.<sup>3</sup> Whereas in the rest of India, Brahmins practised universal pre-pubertal marriage for girls and enjoined it upon other castes through precept and practice, in Kerala, the Namboodiri Brahmins who (though comprising less than 1 per cent of the population)

provided the intellectual and religious leadership to various lower order Hindu groups, did not practise either pre-pubertal or universal marriage.<sup>4</sup> In fact, since only the eldest son among the Namboodiris was supposed to marry a Namboodiri girl, many Namboodiri girls remained unmarried for all their lives.<sup>5</sup> So the question of pre-pubertal marriage for all their girls did not arise. Though pre-pubertal marriage was common among the Nairs and other Hindu groups in Kerala it is well known that such marriages were purely symbolic.<sup>6</sup> Of the two marriage ceremonies which the girls underwent in Kerala, the first ceremony, namely *Talikettu*, was a pre-pubertal ceremony. This was merely a religious sacrament and was not immediately followed by cohabitation. The actual marriage, called the *Sambandam*, came later and was performed as a preliminary to real married life. For this later ceremony no age was specified.

The family organisation in Kerala also probably exercised a major influence on the female age of marriage. As is widely known, a substantial portion of the state's population follows the *Marumakkathayam* system of inheritance.<sup>7</sup> *Marumakkathayam* is descent through the female line. Under this system, succession is traced through females and property descends from mother to daughter.<sup>8</sup> Also what is important to note is that marriage under this system did not call for change of residence for girls on their marriage. Thus even after the *Sambandam* ceremony girls stayed on in their own maternal houses. Naturally the concern with which the fact of a marriageable girl staying on with her own parents was viewed in the rest of the



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TABLE 1 : MEAN AGE OF MARRIAGE AND OTHER DEMOGRAPHIC CHARACTERISTICS OF KERALA

Decade	Mean Age of Marriage				Growth of Po- pulation India and Kerala		Birth Rate		Death Rate		Infant Mortality Rates		Literacy	
	India		Kerala		Decennial Percentage Variation		India		India		India		India	
	Males		Females		India		Kerala		Kerala		Kerala		Males	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1901-10	20.2	13.2	23.33	17.13	5.73	11.75	49.2	42.6	38.68	212	242	9.83	0.69	22
1911-20	20.5	13.6	23.87	17.35	-0.31	9.16	48.1	47.2	38.68	176	210	10.56	1.05	26
1921-30	18.4	12.6	23.31	17.80	11.01	21.85	46.4	36.3	33.76	168	173	12.21	1.81	32
1931-40	20.2	15.0	25.63	19.66	14.22	16.04	45.2	31.2	29.1	148	153	15.59	2.93	37
1941-50	19.8	15.4	25.69	19.35	13.31	22.82	39.9	27.4	22.3	112	74	24.95	7.93	50.0
1951-60	21.4	16.1	26.33	19.85	21.50	24.76	41.7	22.8	16.9	122	61	34.44	12.95	54.2
1961-70	22.2	17.2	—	—	24.66	26.29	38.8	17.3	9.24	—	—	39.51	18.44	66.5

Source : Columns 1, 3, 4, 5 : "Fact Book on Population and Family Planning", Demographic Research Centre, Trivandrum, 1974 ; and "Towards Equality". Report of the Committee on the Status of Women in India, December, 1974.

Column 2 : Registrar-General of India, Final Population Totals, Census of India Paper Number 1, 1962.

Column 6 : Census of India, Paper I of 1971 Supplement, Provisional Population Totals.



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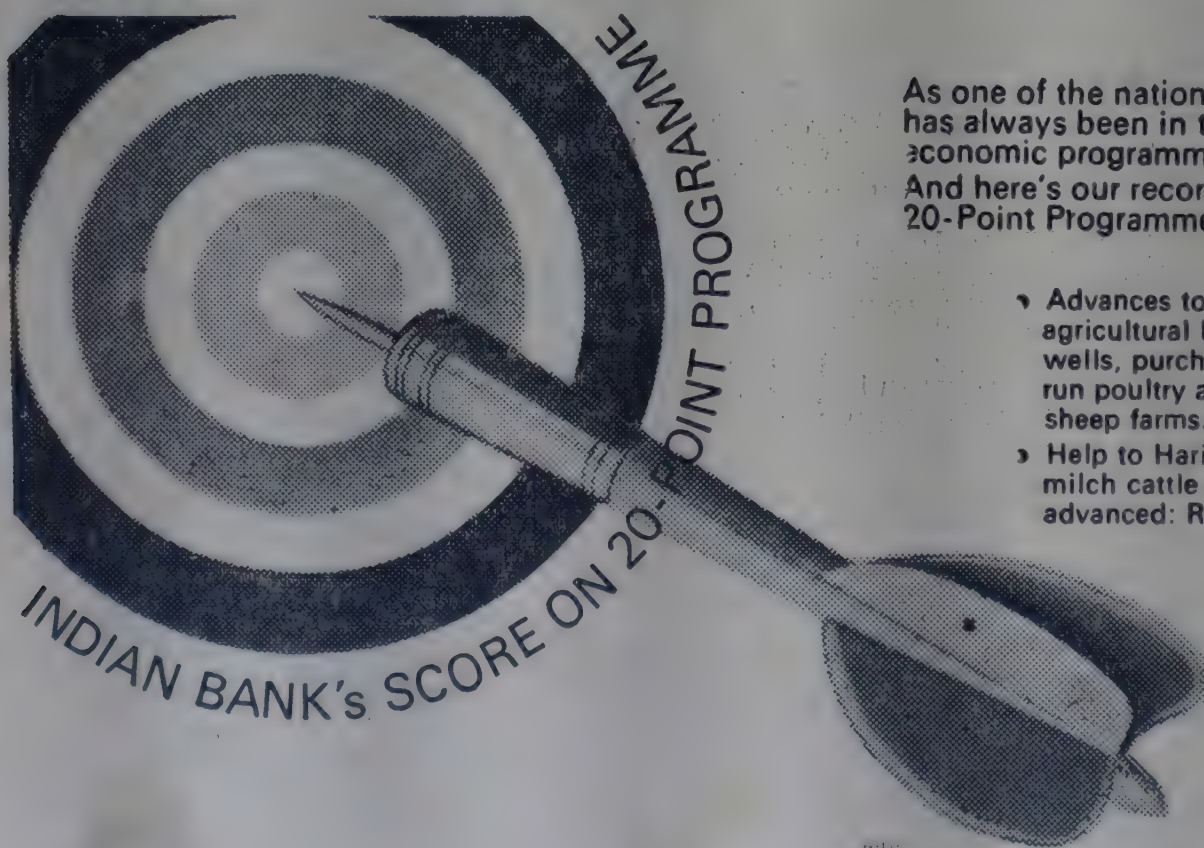
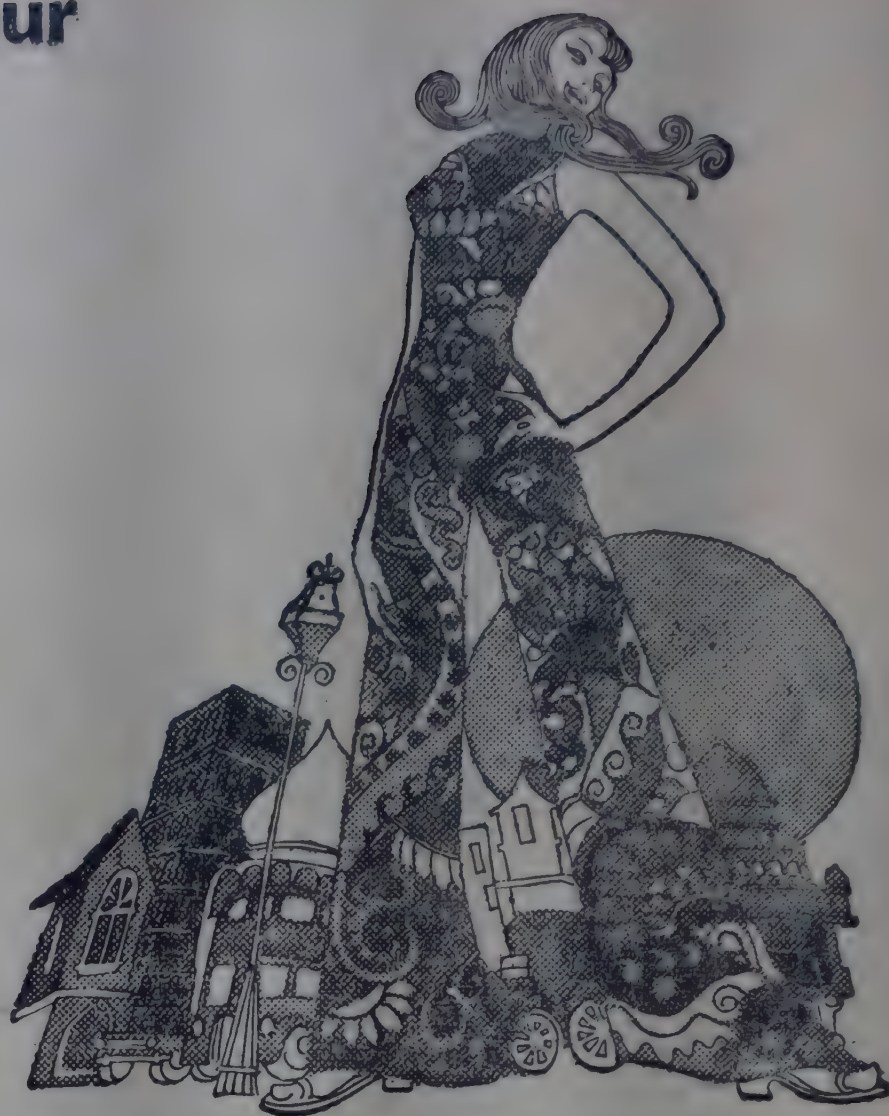
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country was much less felt in Kerala, particularly among the *Marumakkathayas*. Also, the rules of divorce for women and of re-marriage in the event of widowhood were quite liberal.<sup>9</sup>

These factors, namely the system of female inheritance, the right of female residence and the right to divorce and re-marry if widowed, gave to *Marumakkathaya* women a unique status unknown in the rest of India. This special status of women seems to have had an important impact not only on the age of marriage of women but also on the whole texture of the civil condition in the state. Not only was the female age of marriage among the group practising *Marumakkathayam* higher but the proportion of women remaining unmarried was also high; a situation virtually unknown in the rest of India. Since age was specified only for the pre-pubertal ritual but not for *Sambandam*, in many cases there was a tendency to postpone the marriage of girls.

Christianity came to the Malabar coast in the first century after Christ. It not only brought along with it Western ideas but also helped in the spread of education, especially female education.<sup>10</sup> Female education made greater progress in Travancore and Cochin than elsewhere in India; this seemed to make a difference in their civil condition.<sup>11</sup> It is also possible that the religious sanction that Christianity gave to celibacy had its impact on the female age of marriage. The relatively high proportion of the unmarried in Travancore and Cochin is attributed to the influence of Christianity. The influence of Islam was perhaps in the opposite direction since early marriage was quite common among the Muslims. Among the various religious groups in Kerala the Muslims have the highest proportion of early marriages.<sup>12</sup> The Muslims were also least influenced by the Western education, with the result that the disparity between male and female education among the Muslims was very high.<sup>13</sup>

Thus, it would appear that while among the non-Hindu groups in Kerala, education or its absence was an important factor explaining the female age of marriage, this cannot be said of the Hindu groups of Kerala for the earlier period. The fact of higher age of marriage for Hindu women in Kerala at the turn of the twentieth century can be directly related to the im-

pact of factors other than education. In more recent years however the spread of education has possibly become an equally important factor for keeping the female age of marriage high even among the Hindu groups in the state. While education, including female education has spread quite fast, the hold of the *Marumakkathayam* system has for various socio-economic reasons been weakening.

Even with literates comprising only 4 per cent of the female population in the area, the mean age of marriage for women was seventeen years in 1901. It cannot be overlooked however that when less than 1 per cent of the female population in the whole of India was found to be literate, in Kerala the proportion was four times higher. Also the spread of female education since then has been fast so that by 1971, 54 per cent of the females in Kerala were literate, with very little rural-urban differences in literacy rates. This spread of education took place during the period when the influence of the matriarchal system had started weakening. A series of legislative measures were adopted in the early part of the twentieth century "to dispense with the evils of *Marumakkathayam*".<sup>14</sup> These measures considerably weakened the system. The spread of female education during the period must have helped in making up for that weakening in so far as it concerned the tendency towards postponement of marriage. Indeed the spread of female education is possibly the strongest influence today on the age of marriage, in the state. Recent studies on various social groups in Kerala have shown a strong correlation between education and age of marriage. The practice of dowry which came along with the change from matriarchy to patriarchy, and which has now taken root even among the Nairs, Ezhavas and the Vellalas (other patriarchal groups, like the Brahmins, the Christians and the Muslims practised it all along), has also contributed to the postponement of female marriage, and to the lengthening of the educational period. It is easy to see that high schools and colleges make a good waiting place for girls awaiting matrimony.

#### DECLINE IN DEATH RATE

It can be seen from Table 1 that the rate of growth of population in Kerala has always been higher than the all-

India rate. This has happened in spite of the fact that the mean age of marriage was significantly higher in Kerala than the rest of India throughout the period, 1901-1971. It will be wrong, however, to jump to the conclusion that population growth and female age of marriage are positively correlated. Population growth depends as much on death rate as on birth rate, assuming that there is no migration inwards or outwards. In fact, it can be seen from the same Table that since 1941 the main factor responsible for the higher population growth in Kerala has been the relatively higher decline in death rate. Though the estimated birth rate in Kerala is also lower than the all-India rate, the difference is only marginal. Actually, if one took the former Travancore-Cochin parts of Kerala separately, the death rates there were significantly lower than the all-Kerala average. For 1951-60, while the death rate for the Travancore-Cochin area was about 12 per thousand, that for the Malabar area was 23 per thousand, giving an overall figure of 16.9 per thousand. Though high in absolute terms, the death rate of 16.9 per thousand for Kerala as a whole was lower than the all-India death rate of 25 per thousand. Thus the higher than average population growth in Kerala was due to the relatively lower death rate.

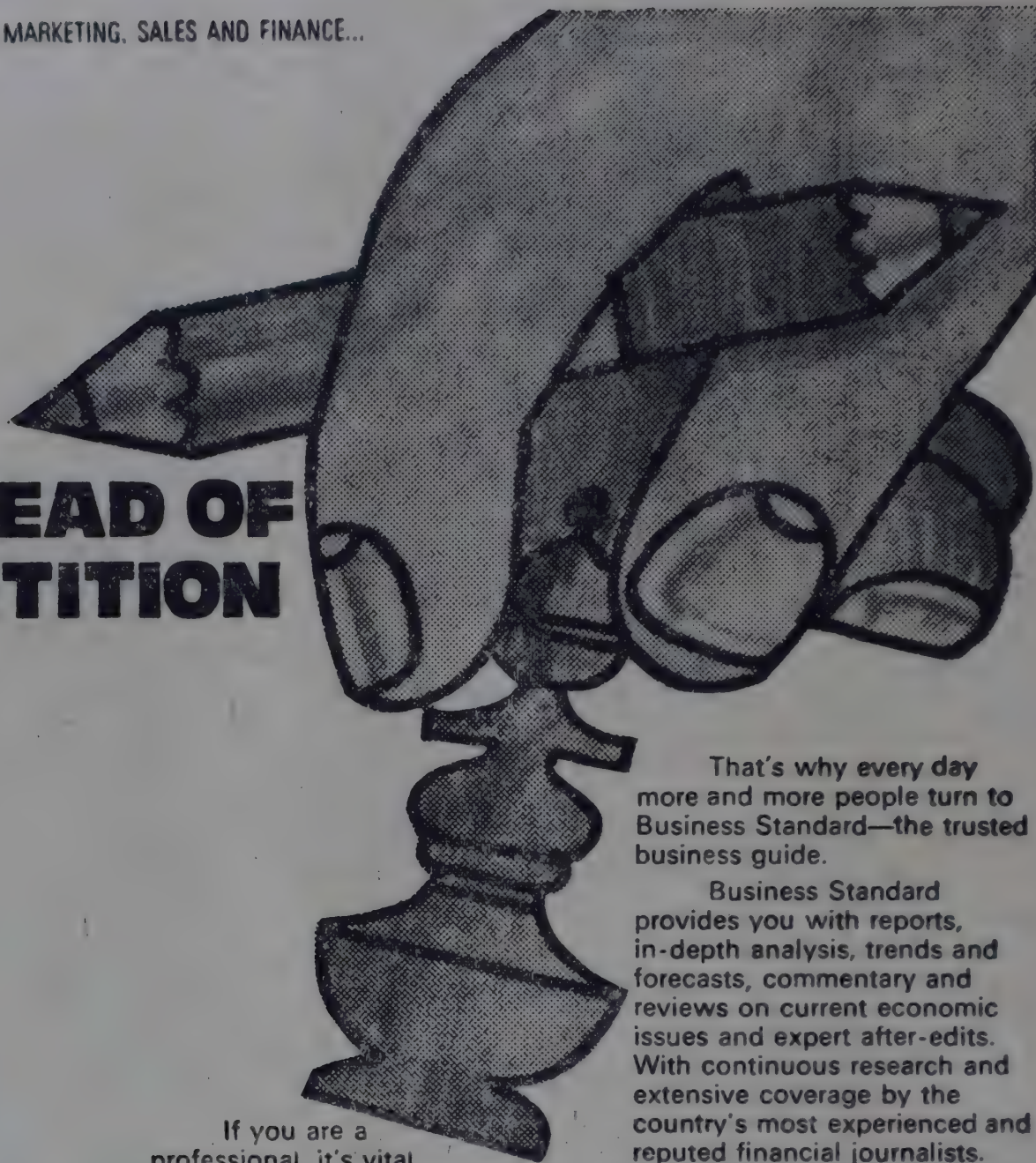
But the fact that the birth rate in Kerala was not significantly lower than the all-India rate is noteworthy because it implies that the higher female age of marriage did not lead to a decline in birth rate. This phenomenon has however not gone unnoticed.<sup>15</sup> In fact the National Sample Survey Report (No 76), based on 14th Round, showed that the marital fertility rate was higher in Kerala than rest of the states as well as India as a whole.<sup>16</sup> It is difficult therefore to resist the temptation to draw the inference that in Kerala at least the higher age of marriage proved ineffective in lowering the state's birth rate. In fact, experts have all along been somewhat sceptical about the demographic effectiveness of raising the minimum age of marriage. Let us quote here an opinion expressed in the Indian context.

But the effect on fertility on the raising of age of marriage from 12 to 15 or even to 18, the age by which the vast majority of the rural women get married, is not likely to produce any significant effect on the fertility of the community. The period from age 18 to 45, the upper limit of re-



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productive age period, is sufficiently long to give a fertile woman six to eight live births unless methods for fertility control are attempted.<sup>17</sup>

But such scepticism derives from the failure on the part of most experts to distinguish between the physical reproductive capacity of women and their desire to produce children. After all, if the women's desire to reproduce can be influenced significantly by the higher age of marriage, and this should be so when the decision to postpone marriage is voluntarily taken by the girls, it should make a considerable impact on their fertility.

#### DECLINE IN BIRTH RATE

The Sample Registration System (SRS) was introduced all over India in 1966, and reliable data about the birth and death rates for different parts of the country, are now available on a year-to-year basis. These data reveal some interesting developments over the past few years in Kerala, as should make experts sit up and re-evaluate their earlier scepticism.

During the five years 1968 to 1973, while the death rate declined by 1.7 points, from 10.4 to 8.7 deaths per thousand, birth rate declined by 4.4 points, from 34.3 to 29.9 births per thousand. So the natural rate of growth of population for the state fell from 23.9 to 21.2 per thousand.<sup>18</sup> Going by the SRS figures, Kerala's death rate has now reached a level which is comparable with the death rates prevailing in the developed countries. So there is little scope for any further decline. From the point of view of population growth Kerala's growth rate of population should decline hereafter more or less by the same points as its birth rate. And since, as noted above, the birth rate has started declining at the rate of one point every year, the population growth should also decline at the rate of one point every year.

This trend towards declining birth rate in Kerala is confirmed by corresponding fertility rates, which too have fallen. The fertility rate, in terms of the number of children born to a group of 1,000 women through their reproductive years, declined for rural Kerala from 4.3 in 1969 to 3.8 in 1973. The corresponding all-India rate for 1969 was 5.6.<sup>19</sup> A recent study of the primary school enrolment showed that the annual rate of growth of enrolment in the first year of primary schools declined from about 4 per cent in the first half of the sixties to 1.6 per cent in the second half of the sixties. This again confirms

TABLE 2 : BIRTH AND DEATH RATES 1968-73

Year	Kerala		India	
	Births Per 1,000 Population	Deaths Per 1,000 Population	Births Per 1,000 Population	Deaths Per 1,000 Population
(1)	(2)	(3)	(4)	(5)
1968 (Rural)	34.3	10.4	39.0	16.8
1970 (Rural and Urban combined)	32.1	9.2	36.8	15.7
1971 ..	31.6	9.1	36.9	14.9
1972 ..	31.7	9.1	36.6	16.9
1973 (Rural)	29.9	8.7	34.6	15.5

Source : "Economic Review Kerala—1975", The State Planning Board, Government of Kerala, Trivandrum.

the declining trend in birth rate disclosed by the SRS.

#### PUBLIC HEALTH FACILITIES

Can one attribute the recent decline in the birth rate, however delayed, to the continually rising age of marriage of women in Kerala? There is considerable force in the view that the rise in the marriage age need not by itself make much of an impact on fertility rates, because the span of reproduction period is still sufficiently long to give a fertile woman six to eight live births. But such a view seems to overemphasise the immediate physical aspect. Also, as was noted above, mortality rates have declined considerably in Kerala, and have now reached a level comparable with those prevailing in the developed regions of the world. This decline in mortality itself must have been, to some extent at least, the result of the rising female age of marriage in the state. Higher age of marriage of girls naturally meant avoidance of pregnancies at an immature age and exposure to the risks of childbirth. Thus the higher age of marriage alone could have brought about some lowering of both infant mortality rates and maternal mortality rates. Infant mortality in Kerala had fallen sharply during 1950-70 and was the lowest in India in 1971; also the female expectation of life at birth in Kerala was the highest (see Table 1).

While the lower than average rates of both maternal and infant mortality rates can be attributed to the rising age of marriage, this certainly could not have been accomplished without the supporting health and medical services which Kerala now offers. After all, until 1941-50, the infant mortality in Kerala was above the all-India average and this was so in spite of the higher than average female age of marriage. Kerala provides not only better

but also much more dispersed medical and public health facilities as compared to other states.<sup>21</sup> As a result of this there is not only a general decline in the death rate and infant mortality rate but in the expectation of life at birth for both males and females. Life expectancy has doubled in Kerala in the last forty years. The female life expectancy in Kerala is actually higher than male life expectancy, as in the developed countries. These levels have been attained only recently as the medical and health services have spread widely to all parts of the state.

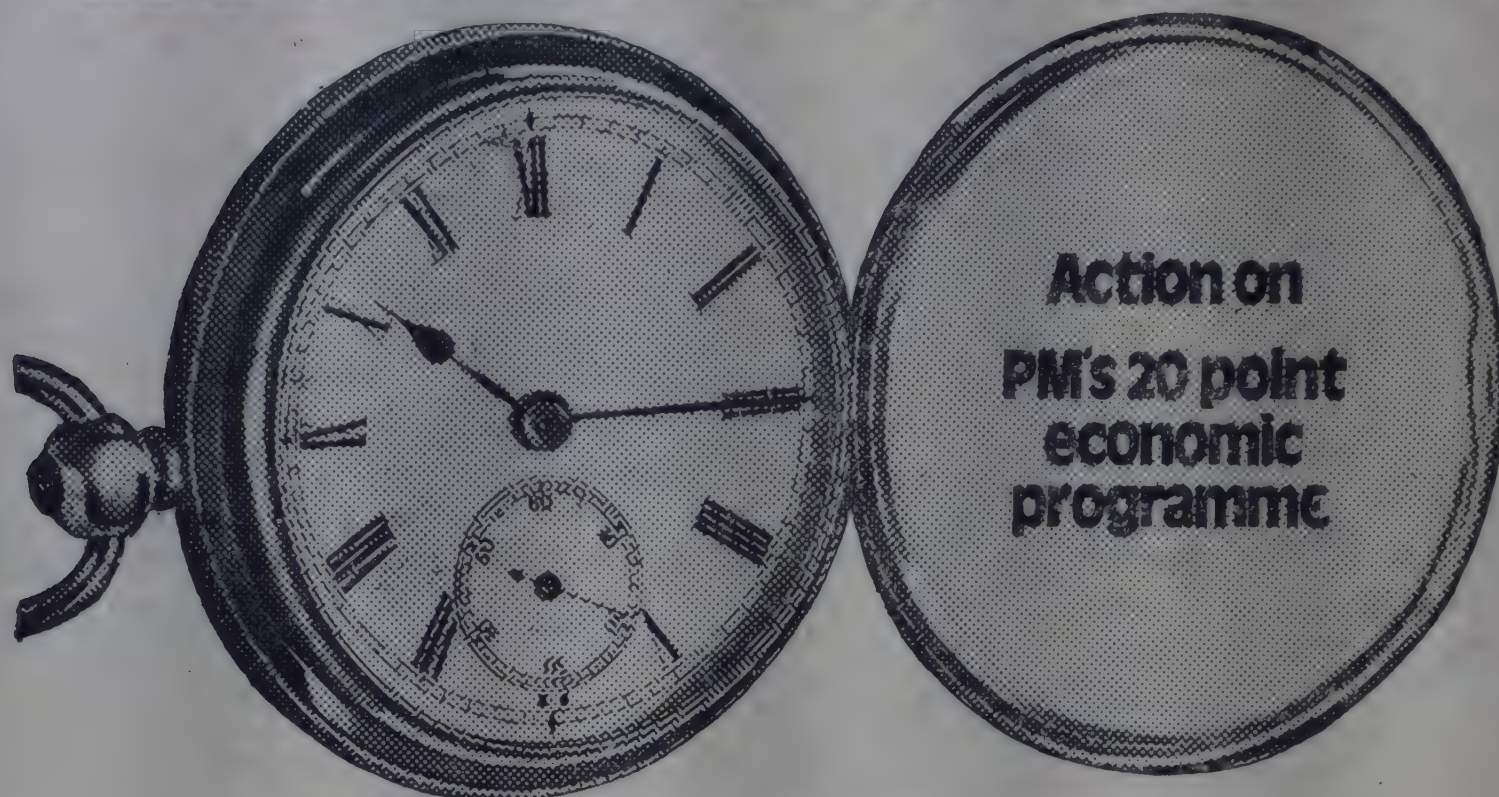
With the decline in infant mortality in particular and mortality in general it is only natural that the prospect of child survivorship should have correspondingly improved. This has certain important implications. Recent studies in some other countries have shown that there exists an inverse relationship between child survivorship and fertility rates. In Bangladesh, it was found that mothers who lost a child had 0.5 children more on the average than mothers who did not lose a child.<sup>22</sup> In Egypt, a study of a sample of women aged 45-47 showed that those who had lost a child had more births and also a larger number of surviving children than those who had not lost a child.<sup>23</sup> To the extent that rising female age of marriage contributes to improved child survival, particularly when it is combined with improvements in medical and public health services, it can be said to contribute to reduction in fertility rate. Improvement in female education also has its impact on the women's desire to reproduce and thereby on their fertility.

#### FEMALE EDUCATION

Let us go back now to the connection between female literacy and the age of marriage. We have seen above that though the higher than average



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age of marriage in Kerala was the outcome of the somewhat unique socio-cultural forces prevailing there, in recent times education seems to have become the strongest factor to push up the age of marriage.<sup>24</sup> Usually, when a positive statistical relationship is found between education and age of marriage, one tends immediately to infer that it is the higher level of literacy which leads to postponement of marriage. Implicit in it is the assumption that age of marriage is the dependent variable. But could not the sequence be somewhat different? It is possible that the higher age of marriage itself prompts people to keep their girls at school and for longer periods. Historically, at least in Kerala, the higher age of marriage came first thanks to other factors, and the expansion of female education came much later. Once the girls were sent to schools and colleges, their education could certainly play its part in pushing up the age of marriage still further. It should thus have been the initial fact of the higher age of marriage which helped Kerala lead the rest of the country in the sphere of female education.

#### CONCLUSION

Thus what do we find in Kerala? A mere shift in the age of marriage, without female education, did not decrease the number of children a woman had. The higher age of marriage did perhaps create a favourable atmosphere for the spread of female education. It was however the reduction in infant mortality rates, due partly to shift in the age of marriage but largely to improvement in medical and public health facilities, which improved the child survivorship and this in turn seems to have influenced the number of children a woman wanted to have. Thus it is the high age of female marriage with a combination of all the above mentioned factors which seems to have at last brought down the birth rate in Kerala. A mere shift in the age of marriage, without a well dispersed medical and public health services as well as facilities for female education, could not have been much effective. What Kerala really shows to the rest of India is the need to combine all these factors. It also cautions us against relying only on higher age of marriage to reduce the rate of growth of population, because going by Kerala's experience, higher age of marriage alone might well lead to higher rates of growth of population, at least in the immediate future. The postponement of marriage

can be viewed as a device not only to reduce the reproduction span but also to increase the chances of child survivorship and to improve the level of female education; its usefulness as a demographic instrument therefore can be considerable. But unless postponement of female marriage is accompanied by a significant improvement in medical and public health facilities on the one hand and educational facilities on the other hand, raising the age of marriage alone may not secure the demographic results the New Population Policy, given its time perspective, is aiming at.

#### Notes

[I wish to thank M N Srinivas and K N Raj for their very helpful suggestions, but the responsibility for the views and opinions expressed is entirely mine.]

- 1 The All-India Census Report of 1921 put it as follows: "(1) It implies cohabitation at an immature age sometimes even before puberty and practically always immediately on the first sign of puberty resulting in grave physical effects upon the girl and in all the evils of premature child birth and (2) in the event of the husband dying the child-wife is in the case of the castes in which the remarriage of widows is prohibited left a widow for life". The 1931 All-India Census Report, while reviewing the position immediately after the Sarda Act came into effect, emphasised the same aspect of early marriage thus: "Infant marriage naturally involves infant widowhood, a feature of no significance where remarriage is allowed but of serious importance where it is not." "Age and Marital Status", Census Centenary Monograph No 8, Census of India 1971, Chapters VI and VII, pp 130 and 153.
- 2 In the princely states of Baroda and Mysore, age of marriage had been the subject of legislation much earlier. The Infant Marriage Prevention Law of 1904 in Baroda fixed the minimum age of marriage for girls at 12. In Mysore a law dating back to 1894 prohibited the marriage of a girl under eight years of age.
- 3 T M Velu Pillai, (1940), "The Travancore State Manual", The Travancore Government Press, Trivandrum, Volume I, p 394. Also it has been contended that infant marriage was foreign to the earlier inhabitants of India and that it was introduced by the Aryans. See "Age and Marital Status", Chapter VII, p 120.
- 4 "Age and Marital Status", Chapter VI, p 155.
- 5 In this way the Namboodiri family was prevented from splitting into segments and was enabled to maintain its ancestral estate intact over many generations. Of course Nam-

boodiris did practise polygamy also. Schneider, D M and Gough, Kathleen (1961), "Matrilineal Kinship", University of California Press, p 320.

- 6 Wigram, Herbert (1900), "Malabar Law and Custom", Chapter II, p 34.
- 7 It is estimated that till 1931 less than half of the population in the regions now constituting Kerala followed the patriarchal system, known locally as the *Makkathayam* system. This included the Christians, Muslims and Hindu castes such as Brahmins, Kammals and Parayans. The rest of the population followed either *Marumakkathayam* system or a mixed system. G Surendranathan Nair, (1967), "Effects of Marumakkathayam on the Fertility Pattern of Kerala", The Demographic Research Centre, Bureau of Economics and Statistics, Trivandrum.
- 8 Achutha Menon, (1911), "The Cochin State Manual", Chapter III, p 192.
- 9 "But among Nayars, a woman continues through life to belong to the family in which she is born and the sexual relation which she forms, or her so-called marriage, operates in law neither to give her the domicile of her husband nor to create a disability in her either to remarry or to put an end to her marriage at her pleasure during her first husband's life". Wigram, Herbert (1900), "Malabar Law and Custom", Chapter I, p 13.
- 10 "The Missionaries were the first to establish girls schools. The earliest effort was that of Mrs Mead in 1819... But the Missionaries were not merely content to establish schools. They tried to influence public opinion in the matter. They published pamphlets on the advantages of female education and exhorted people to send their girls to school." Nagam Aiya, 1906, "The Travancore State Manual", Volume II, p 474.
- 11 "The increase in the number of the unmarried attended by a corresponding decline in the number of the married is mostly characteristic of such Malyali caste or communities as are advanced in English education." *Census of India, 1931*, Cochin, Chapter VI, p 96.
- 12 "Till the early decades of the present century it was only normal that a majority of Muslim girls were married before they were twelve years old." A Sreedharan Menon, 1962, "Kerala District Gazetteers", Cannanore, Travancore Government Press, p 219.
- 13 "The Muslims have always occupied the last place in literacy among the followers of different religions in the State... The restrictions enjoined by the Purdah system must to a great extent account for the fact that there are but very few Muslim women able to read and write, and the disparity between the males and females in



- literacy is greatest among Muslims who have 230 literates in every 1000 males but only 41 literates in the same number of females, and for every 100 male literates among them there are but 17 female literates." *Census of India, 1931 Cochin*, p 195.
- 14 A number of laws were passed in Travancore, Cochin and Malabar regions of the present-day Kerala, with a view to regulating marriage, succession and partition among the matriarchal groups and the thrust of these laws was such that led some observers to construe them as "providing for transition from matriarchy to patriarchy". L A Krishna Iyer, 1970, "Social History of Kerala", Volume II, p 86.
  - 15 "This higher age of marriage has however not resulted in the lessening of the fertility of the women in the state as compared with other regions in the country. While women in other states with younger age at marriage complete their reproductive life in the early 30s the Kerala women have high fertility even upto 40 years of age." G Chandrasekharan, "Population Growth in Kerala; Its Implications", Demographic Research Centre, Bureau of Economics and Statistics, Trivandrum, 1965, p 43.
  - 16 National Sample Survey, 1963, "Fertility and Mortality Rates in India (14th Round)", Number 76, Government of India.
  - 17 K K Mathen, 'The Impact of the Family Planning Movement on the Indian Population' in "Papers Contributed by Indian Authors to the World Population Conference", Belgrade, Yugoslavia, Office of the Registrar-General of India, 1965, p 289.
  - 18 The results of these surveys are published regularly in the Sample Registration *Bulletin* issued by the Registrar-General, India, Ministry of Home Affairs.
  - 19 Sample Registration Report, Number 10, Bureau of Economics and Statistics, Kerala, 1975.
  - 20 P R Gopinathan Nair, 'Decline in Birth Rate in Kerala: A Hypothesis about the Inter-relationship between Demographic Variables, Health Services and Education', *Economic and Political Weekly*, Annual Number, February 1974.
  - 21 Centre for Development Studies, 1975, "Poverty, Unemployment and Development Policy: A Case Study of Selected Issues with reference to Kerala", Volume I, Chapter X.
  - 22 Schultz, Paul T, 'Retrospective Evidence of a Decline in Fertility and Child Mortality in Central East Pakistan' *Demography*, August 1972.
  - 23 S Hassan, Influence of Child Mortality on Fertility, Paper presented at the Annual meeting of the Population Association of America, New York, April 1966.

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# Health, Medicine and Underdevelopment

Lesley Doyal

Imogen Pennell

*A growing volume of literature exists on the appalling state of health of the populations of most underdeveloped nations. However, such material is almost entirely descriptive, with little attempt at conceptual analysis, particularly of a critical kind. Thus health planners continue to abstract the problems of death and disease from their socio-economic context, and to transmute them into technical problems amenable to purely technical solutions.*

*One of the factors which allows this approach to the health problems of the third world to predominate has been the failure of Marxists to incorporate the implications of health and disease into their analysis.*

*In this article an attempt is made to show some of the reasons why questions concerning the material condition of third world populations, and their physical reproduction, can and should be taken into account in making sense of the real nature of contemporary underdevelopment.*

## I

### Introduction

WESTERN capitalism has developed within the context of a particular set of economic and social relationships with the third world. Three aspects of this development will be examined here with regard to their significance for health and medical policy. First, it will be argued that the processes of colonialism and imperialism have produced widespread changes in both the social structures and the material environments of the satellite countries, with obvious implications for the patterns of death and disease in those countries. Second, it will be shown that the nature of imperialism has meant that Western scientific medicine, based on a curative model, has been inappropriately exported to the satellite countries as an apparent solution to these health problems. Finally, it will be stressed that medicine in the advanced capitalist states has evolved on the basis of specific economic and manpower resources drawn from the satellite countries. We shall show that the significance of these transfers can only be adequately understood as mechanisms of a world capitalist market system. The underdevelopment of health is not an original state, but an active process generated by imperialist exploitation. Thus the nature of third world health problems and the obstacles to their solution are to be found primarily in the structure of the economic relations historically created between the capitalist powers and their satellites. This is reinforced by the economic and social relationships created by imperialism within particular underdeveloped countries.

## II

### Underdevelopment of Health

Before outlining the nature and

causes of the pattern of diseases which are found in the third world, it is important to stress the practical difficulties involved in obtaining relevant data. There is usually a considerable under-reporting of disease; misreporting occurs due to multiple causation of death, and a large number of deaths are either unrecorded or their causes remain unidentified. In addition there are obviously great variations between individual underdeveloped countries, between rich and poor in a particular country, and between urban and rural health standards. However, we believe it is possible both to provide a generalised (yet basically accurate) account of the health problems faced by the third world as a whole, as well as to analyse the relationship between these disease patterns and the socio-economic structure of underdevelopment within the world economy.

The major diseases in third world states fall into two basic categories: diseases associated with malnutrition, and infectious diseases. The infectious diseases can be subdivided into three groups according to their method of propagation — faecally-related air-borne and vector-borne. Malnutrition and infections are responsible for the majority of deaths and illnesses in underdeveloped countries, particularly in children under five, who account for at least half of all deaths.<sup>1</sup> These diseases will now be examined in more detail.

#### MALNUTRITION

Widespread malnutrition is a common feature of underdevelopment and has a crucial impact on patterns of death and disease. The UN has estimated that about 25 per cent of the population of the Western hemisphere, 80 per cent of that of Africa and 90 per cent of that of Asia live in countries where the distribution of food is such that the aver-

age number of calories and weight of protein available to each individual is below their calculated requirements.<sup>2</sup> Malnutrition can constitute a primary cause of death, especially among babies and young children. It may also lead to specific protein-calorie deficiency diseases such as kwashiorkor or marasmus. It is a major contributing factor in infectious diseases because it reduces initial immunity to them. Once such diseases are contracted, an inadequate diet significantly reduces an individual's chances of survival. A recent WHO study in Latin America has shown that 9.4 per cent of childhood deaths investigated were due to measles, and that 60 per cent of these had protein-calorie malnutrition as a contributory or pre-existing cause.<sup>3</sup> The same study revealed that in 57 per cent of the children who died before their fifth birthday, deficient birth-weight or malnutrition was either the underlying cause of death or an associated cause. In the Congo, a survey of children admitted to hospital with various disorders showed 87 per cent of them to be malnourished.<sup>4</sup> Clearly the only real solution to this situation would be an adequate food supply for the whole population. However, the reasons why this is not likely to be forthcoming under the present world economic system are briefly covered later in this article.

#### INFECTIOUS DISEASES

Faecally-related diseases are transmitted through contact with human faeces, the most common being the intestinal parasitic and infectious diarrhoeal diseases. Also included are polio, typhoid and cholera. The infectious diarrhoeal diseases are a major cause of death among children in the third world; in Latin America nearly a third of all childhood mortality can be attributed to them.<sup>5</sup> Intestinal parasitic diseases tend



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to be chronic and debilitating over long periods of time. These diseases are a consequence of inadequate sanitation and contaminated drinking water. There is little evidence that progress is being made in providing such fundamental necessities of life in most underdeveloped countries. A recent WHO report cited in *The Lancet* stated that "in the urban areas of the Third World the population without sewage disposal will probably double in the next ten years; and at the present rate of going there will be nearly five hundred million people without an adequate water supply in the towns alone by 1980".<sup>6</sup>

Air-borne diseases are largely spread by breathing the respiratory secretions of infected persons, and include tuberculosis, diphtheria, whooping cough, meningitis, influenza, measles, smallpox, chickenpox and others. The spread of these diseases is greatly facilitated by overcrowded and inadequate living conditions which are the norm in underdeveloped countries, particularly in expanding urban areas.

Vector-borne diseases are caused by parasites which are transmitted to human beings by means of disease vectors such as mosquitoes (malaria), snails (schistosomiasis) or tsetse flies (sleeping sickness). Most of the so-called 'tropical' diseases fall into this category but they are, in fact, less devastating in terms of mortality than the other infectious diseases. However, they have extremely debilitating effects on entire communities in many parts of the third world. There are estimated to be 1,136,000,000 people still exposed to malaria<sup>7</sup> and despite the fact that eradication of this disease has been a cornerstone of WHO policy for twenty years, it is as prevalent as ever in its main areas of distribution.<sup>8</sup> Estimates of the incidence of schistosomiasis (bilharzia) vary between 180,000,000 and 250,000,000 persons affected.<sup>9</sup>

Contrary to common belief, diseases of underdevelopment are not inextricably bound up with 'tropical' conditions as such: malaria, cholera, plague, leprosy, smallpox, typhoid, tuberculosis and many intestinal parasites have all thrived in western Europe in the past.<sup>10</sup> Indeed there is a striking similarity between disease patterns in underdeveloped countries today and the experience of the now developed capitalist countries a century ago. For example, life expectancy rates, infant mortality rates, and the proportion of deaths caused by infectious diseases all show a clear parallel.<sup>11</sup> Yet these diseases now associated with underdevelopment have been

overcome in the metropolitan countries, "not because they were driven out by marvellous discoveries of medicine; they faded away before the general amelioration of our state of living as a result of improvements in sanitation — improvements in housing, drainage, refuse disposal — in education and elevation of the standard of living for the generality of the people."<sup>12</sup> This indicates that the diseases which concern us here — and the high mortality rate that goes with them — are a direct consequence of the wretched conditions of material life in the third world. Similarly, as in nineteenth century Britain, the only effective response to these diseases is likely to be a transformation of such basic conditions of life.

However, it is in saying this, that the differences between the situation of nineteenth century Britain and the underdeveloped countries today becomes clear. It is the imperialist relationship itself which, at a variety of levels, creates the obstacles to the realisation of an effective health policy in the third world. Thus the underdevelopment of health in the satellite countries is the obverse of the very process which enabled the capitalist states to invest profitably in the development of the health of their own working class. This will therefore entail a more detailed examination of the role of colonialism and imperialism in producing the patterns of disease and death found in the third world.

### III

#### Imperialism and Generation of Disease: Black Man's Burden

The earliest evidence of imperialism's role in spreading infectious disease dates from the sixteenth century. The literature of the Spanish conquest includes numerous accounts of the decimation of the indigenous populations of the West Indies, Central and South America, through the introduction of smallpox, measles and typhus by the conquistadors.<sup>13</sup> All accounts maintain that these diseases were unknown before the coming of the Spaniards, and many indicate that the ravages of smallpox were instrumental to the success of the conquest.<sup>14</sup> A similar range of diseases were brought to North America by English settlers in the seventeenth century, with disastrous consequences for the native population.<sup>15</sup> However, the most persistent diffusion of disease — spanning some 400 years — was created by the slave trade. Not only did the

trade cause excessively high mortality among its direct victims, but a number of diseases were carried from West Africa to the Americas in the process (e.g. yellow fever, leprosy, hookworm and yaws).<sup>16</sup> There is also evidence that the subsequent repatriation of freed slaves to Liberia and Sierra Leone caused the transmission of several new infections to West Africa.<sup>17</sup> Only a hundred years ago measles and tuberculosis were unknown in Africa and yet early this century they had become firmly established, as a direct result of colonial 'development'.<sup>18</sup> Today measles and TB are two of the principal causes of death and disease in most African countries.<sup>19</sup> Exploitation of African labour in growing urban areas played a major role in the spread of these diseases, partly as a result of the contact it brought with Europeans and partly because it meant a marked deterioration in living conditions.<sup>20</sup> A report on tuberculosis among African miners, published in 1932, pointed out that "many hygienic native customs, which were most valuable in preventing the spread of disease, are disintegrating under the spread of civilisation".<sup>21</sup> (For example, the imposition of the African hut tax led to overcrowding and discouraged long established customs such as the isolation of sick persons.) Other diseases disseminated by imperialism around the turn of the century included plague and sleeping sickness. The latter is now a major health problem, but it was unknown in East Africa before being introduced there by one of Stanley's expeditions in 1887.<sup>22</sup>

More recently, technology has played an important role in the production of disease. For example, the spread of sleeping sickness has been greatly facilitated by the piecemeal 'development' schemes supported by governments and aid organisations all over the world. Dams and irrigation systems constructed without reference to ecological and social factors often provide new breeding grounds for disease vectors.<sup>23</sup> Another recent development has been the promotion of disease control measures (such as those used by the WHO against malaria) which, though apparently effective in the short term, encourage resistance and re-infestation after a few years. The rapid growth of towns and cities characteristic of most imperialist development has occurred without the basic provisions of employment opportunities, adequate housing, sanitation and clean water. This has added to the burden of ill-health already





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carried by rural communities. Overcrowded living conditions have increased the incidence of infectious disease, while at the same time urban malnutrition is appearing as a result of inflated prices, highly "refined" (i.e. nutritionally inferior) foodgrains, and the commercial promotion of processed foods.<sup>24</sup>

As we have already seen, the question of malnutrition is not confined to the cities. Traditional interpretations assume that it is simply a question of too little food and too many people in a given country. However, the apparent scarcity of food in underdeveloped countries must be understood as having arisen in large part from the plunder of indigenous economies by the international capitalist market system. Malnutrition in the third world can therefore be seen as the creation of the very process which mitigated the poor diets of the working class in countries like Britain, thereby contributing to their improved health. Malnutrition and its destruction of health have accompanied the destruction of traditional agrarian economies, the imposition of colonial monoculture, and the substitution of cash crops for food crops. Whereas, before the Second World War the underdeveloped countries as a whole were net exporters of cereals, they have since become net importers.<sup>25</sup> The recent growth of multinational 'agribusiness', producing luxury foods for Western consumption, has further eroded domestic food production in third world countries.

In the light of the above, it can be seen that much of the disease in the underdeveloped countries is in a very real sense the product of their socio-economic relations. At the same time those very relations have so far prevented the adoption of either of the solutions that were available to meet similar problems in nineteenth century Britain (the provision of public health measures and better general living standards), since these solutions were dependent on a burgeoning industrial economy. What is important here is that the necessary excess accumulation in the metropolitan states was achieved largely at the expense of their underdeveloped satellites, whose economic wealth was siphoned off for generations to finance the development of the metropolis itself. To the extent that this exploitation continues, it is clear that the mechanisms of imperialism are not only part of the process by which disease is created; through their prevention of autonomous economic development in the third world, they are part of the obstacle to

the solution of these problems. The underdeveloped states cannot provide increased real wages or adequate food supplies for their entire populations while they remain economically dependent. It is in this context that there has been a widespread export of the commodity of "Western medicine" to the third world, and it is the reasons for, and nature of, this process which must be examined next.

#### IV

### Medicine and Imperialism: White Man's Grave?

#### COLONIAL PERIOD

Although disease had always been a major obstacle to imperialist expansion, it was only in the late nineteenth century that serious alarm was expressed within the British government about the devastating effects of infectious disease on its white communities overseas. Hitherto, medical facilities in the colonial territories had been provided almost exclusively by the imperialist trading monopolies for their own European staff. The scope of these facilities had gradually been extended to cater for growing military and administrative establishments. However, only in the latter part of the nineteenth century was imperialist expropriation sufficiently rationalised to allow the British State to assume responsibility for unprofitable liabilities such as medical care. The same period saw the growing necessity for an aggressive policy of imperial consolidation, particularly after the onset of economic depression at home accompanied by intense industrial competition from Germany and the US. However, as the commitment of white manpower increased, so did the scale of fatal epidemics. The improving of health conditions in Britain itself emphasised still further the crisis in colonial medicine. Consequently, the impotence of existing curative medicine necessitated a new commitment to research directed primarily towards the European agents of imperialist expansion. For example, the Colonial Secretary, Joseph Chamberlain, was instrumental in establishing the London and Liverpool Schools of Tropical Medicine in 1899 on the understanding that "the study of tropical disease is a means of promoting Imperial policies".<sup>26</sup>

The benefits to indigenous populations from this medical research were negligible in the early part of the twentieth century, being almost entirely contingent on the greater benefit derived by the white minority. In 1903 me-

dical administrators were instructed firstly to preserve the health of the European community, secondly to keep the African and Asian labour force in good working condition, and lastly to prevent the spread of epidemics.<sup>27</sup> Such a policy entailed selective minimal health provisions for miners, plantation workers and railway builders — all crucial to an extractive economy. The health problems of the masses (apart from crucial workers) were officially neglected unless the imperialists themselves were threatened by contagion.<sup>28</sup> The majority of the population still depended on traditional healers, or sometimes, on another feature of colonial penetration, the Christian mission. Missions generally served rural areas remote from government control, and their work not only promoted evangelism but "was acknowledged as most helpful to the government in their endeavour of opening up tropical Africa".<sup>29</sup> In recognition of their part in undermining resistance to foreign domination, medical missions began receiving permanent subsidies from the British administration (after the First World War in the case of East Africa).<sup>30</sup>

Missions, however, served only limited areas and provided only rudimentary *curative* medicine. *Preventive* medicine barely existed. In so far as any public health measures were initiated in colonial territories, they were either a necessary bulwark against those diseases which showed little racial discrimination (e.g. malaria and sleeping sickness), or they formed infrastructural investments designed to facilitate further accumulation. For example, in 1939 the Colonial Development Advisory Committee noted that, "If the productivity of the East African territories is to be fully developed, and with it, the potential capacity of those territories to absorb manufactured goods from the United Kingdom, it is essential that the standard of life of the native should be raised and to this end the eradication of disease is one of the most important measures".<sup>31</sup> From the 1929 Colonial Development Act until the dissolution of the Empire, it can be shown that health and welfare policies were conditioned primarily by the economic conditions within Britain itself, particularly unemployment and the need for export markets.<sup>32</sup> Direct aid was meagre, loans led to chronic indebtedness, and the central principle of British imperialism, that colonies should be self-supporting, was maintained to the end.<sup>33</sup> Thus the oppressed populations were financing colonial infrastruc-



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ral developments (through direct taxation)<sup>34</sup> in addition to British industrial growth (through the expropriation of resources and surplus value).

#### POST-COLONIAL DEVELOPMENTS

There is a striking uniformity in the pattern of medical care found in third world countries today, despite their diverse historical legacies, and almost irrespective of their levels of industrialisation. This appears to stem from the structural constraints on independent national development when it is pursued in a context of continuing economic dependence. Certainly, it is only those countries which have broken decisively with world capitalism (e.g. China, Vietnam, Cuba), which have successfully begun to liberate the potential for health among the mass of their people.

Throughout the capitalist dominated third world there has been a growing acceptance of the Western medical model as a way of mediating between man and disease. This implies a hospital-based, high technology, curative medicine dispensed on an individual commodity basis. To some extent this system can be explained as an inheritance from the colonial past. However, more crucial has been the penetration of underdeveloped countries by a market system which has reproduced capitalist relations in the circulation of commodities even where traditional modes of production still persist. Thus scientific medicine with its associated drugs and technical equipment tends to be seen as one of many attractive goods on the international market. This has particular appeal for the indigenous bourgeoisie, whose patronage has contributed greatly to the adoption of private Western medical care. It is of course true that this pattern of medicine has a certain logic for a class which is largely protected from the life-threatening environmental conditions to which the rest of the population is exposed. However, the expensiveness of such a system restricts medical services to the urban areas where the rich are concentrated. The majority of people in the third world, on the other hand, live in small scattered rural communities and cannot afford medical services even where they are accessible. In Colombia 74 per cent of all doctors and 86 per cent of all nurses practise in its state capitals, where only 31 per cent of the population lives.<sup>35</sup> In Iran and Turkey, 40 per cent and 44 per cent of doctors, respectively, work in the largest city.<sup>36</sup> In Ghana "health services are so distributed that they cannot offer any kind of service to more than, at

most, 20 per cent of the population".<sup>37</sup>

In addition, the practice of Western medicine, with its individualistic curative bias, is inadequate to deal with the problems created by the underdevelopment of health. It is important to stress here that we are not discounting the very substantial benefits of Western medicine. However, few of these benefits can be mobilised for the global alleviation of suffering and disease when the economic relations under which they are produced perpetuate conditions which give rise to the suffering and disease in the first place. The expensiveness of medicine in the third world, for example, has less to do with its real costs than with the nature of technological dependence, and the profitability to multinational firms of maintaining it. The most important, and best documented, example of this is found in the drug industry, where a small number of powerful corporations based in Europe and the US dominate the international market. This is accomplished firstly by a market carve-up in which companies specialise their research and production into limited product lines (e.g. tranquilisers, contraceptives, tetracyclines).<sup>38</sup> Competition is further minimised by a patent system which secures a monopoly trading position for the firm concerned. Once a patent is registered, no competitor can enter the market whether or not it is being exploited by the patent holder.<sup>39</sup> Even in the more industrialised countries of the third world such as India, about 90 per cent of patents are foreign owned.<sup>40</sup> Since the majority of patents taken out in underdeveloped countries remain unexploited, they are primarily "a means for limiting or restricting the flow of technology from the industrialised to developing nations".<sup>41</sup>

Various mechanisms have been employed by the multinational drug companies to inhibit the transfer of technology to third world countries. But even when a complete manufacturing process is adopted for local production, India's experience shows that the time lapse involved allows the original manufacturer to develop a new product to supersede it.<sup>42</sup> More often, local manufacture just consists of formulating and packaging imported chemicals or intermediate products.<sup>43</sup> As these imports are invariably from another subsidiary of the same company, they open the way for 'transfer pricing', a method of extracting additional profits through dubious transactions between the branches of a single multinational firm.

Other malpractices by the pharmaceutical industry in the third world

include dangerous advertising and promotion of drugs. A recent survey in Latin America showed that companies frequently minimise risks and exaggerate claims for their drugs in ways not permitted in the home market.<sup>44</sup> As 'self-medication' without prescription is widespread in the third world, concealment of drug risks is particularly dangerous. There are also reports of drugs withdrawn from sale in the country of origin for lack of safety or ineffectiveness, which are then off-loaded in underdeveloped countries.<sup>45</sup> Finally, the research and development programmes of the pharmaceuticals are largely irrelevant to the needs of the third world, with many diseases of underdevelopment receiving no attention at all. On the other hand, the populations of underdeveloped countries are increasingly used in clinical trials. For example, throughout the history of contraceptive trials, it has been the women of the third world who have been used to determine whether or not contraceptives are safe for women in the metropolitan countries to use.<sup>46</sup>

Other profitable areas of medicine are related to hospital development and equipment. Apart from the vast capital outlay required for hospital construction, running costs are very high because they are tied to technical installations which can only be restocked through imports. As with the high price of drugs, prestige hospital developments distort the whole balance of third world health expenditure (in 1968, 60 per cent of Uganda's entire health budget was absorbed by its teaching hospital<sup>47</sup>), while being totally inappropriate to meeting real needs. Though capitalist medical technology may alter the effects of (some) diseases (if the sufferer can afford it) it cannot lessen their incidence.

One of the consequences of the adoption of the Western medical model and its technology, is the expansion of Western medical education. The rudiments of the system had been introduced very slowly under colonial rule, partly to offset shortages of white medical manpower and partly to create a subordinate but well-trained hospital labour force.<sup>48</sup> Caste-like racial distinctions were enforced. In East Africa, for example, Europeans were 'doctors', Asians were 'sub-assistant surgeons' and Africans 'Assistant Medical Officers' — yet all received a similar training. Similar distinctions continue to operate in Zambia today.<sup>49</sup> In Uganda in 1947 a black doctor was paid only a quarter of a white doctor's salary, and only half





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The introduction of the National Health Service in 1948 so improved conditions for doctors in Britain that the Colonial Service found it increasingly difficult to recruit them.<sup>50</sup> Once the emergence of local doctors no longer threatened white medical posts, there was no reason for the British Medical Council to continue withholding recognition of Commonwealth degrees. (Few doctors were, however, produced under British rule: at independence in 1961, Tanzania had only 12 Tanzanian doctors.) At the same time, this recognition was obviously conditional on London's approval of curricula and 'standards', which has been a major constraint on innovations necessary to meet local health needs.<sup>51</sup> Because approved curricula demand a long and expensive training, most underdeveloped countries can only afford to educate a small proportion of the health workers actually required, and those chosen are from the small elite with good secondary schooling. The medical socialisation they receive inculcates "trained incapacity for rural practice which is itself the product of the British system of medical training within large centralised hospitals".<sup>52</sup> Instead they are encouraged to adopt 'professional' ambitions which can only be satisfied by urban-based private practice or by emigration, both of which contribute to the distorted pattern of health care in the third world.

Control over medical education by the internationally organised medical profession, in conjunction with economic command of the market by capitalist states, has added skilled manpower to the drain of resources from the third world. Consequently, the long-standing shortage of trained medical personnel in underdeveloped countries is exacerbated, while shortages in Britain, West Germany and the US are filled by men and women trained at the great expense of some of the poorest populations in the world. The cost of training one doctor in Britain is estimated at £28,000<sup>53</sup> and it is apparent that British capitalism is not prepared to pay such a price to staff its hospitals, when former colonies have maintained British 'standards' and can therefore easily subsidise high cost health care in Britain. About a quarter of the doctors working in Britain are from overseas and no less than 10,000 are from India alone.<sup>54</sup> Over the last 25 years Sri Lanka has lost about half its medical graduates through emigration.<sup>55</sup> This export also includes vast numbers of nurses, midwives and unskilled hospital workers. Out of every 7

newly trained West Indian midwives, 3 were working in the Caribbean, but 4 were in Britain.<sup>56</sup> Nor is the drain of manpower confined to former British colonies. A study has estimated that the annual loss for the whole of Latin America due to the flow of doctors to the US was equivalent in value to the total volume of medical aid from the US to Latin America in the whole decade from 1960-1970.<sup>57</sup>

Thus the metropolitan countries have actively underdeveloped the health of their satellite countries, in different ways at different times, according to their own needs. It has also been in their interest to perpetuate the myth that in these countries improved health is predicated on Western scientific medical practice and technology, which can only be acquired on a commodity basis. Until this myth is exploded, the populations of the underdeveloped nations will continue to suffer and die needlessly. They will remain blind to the real determinants of their plight and therefore unable significantly to alter them.

## V

### Recent Innovations in Health Policy

Thus far we have documented the basic pattern of health care in most underdeveloped countries. However, in the past few years, new patterns of health policy have begun to emerge, and these will now be examined. They represent important responses to changes in the nature of imperialism, and to structural changes within some of the underdeveloped countries themselves. In addition they seem likely to represent the future pattern of health policy in these countries, and as such are of considerable significance. But before looking at these different trends, it is important to make some general points about the implementation of health policy (and social policy as a whole) in the third world.

The economic functions of third world states have tended to precede welfare functions, and the latter are at present of very little significance. Third world governments do not (as yet) use welfare measures on any scale as a means of reproducing labour power — except in the case of the small pool of skilled urban labour. The state sector of health care is very much an adjunct to private practice, and there is no socialised medicine of the kind found in many advanced capitalist states. Certain problems have begun to emerge in many underdeveloped countries, which

necessitate more direct control over the reproduction of labour power (or even the prevention of its reproduction). Lack of economic and political autonomy have meant that this control cannot always be implemented by third world states acting alone. At the same time, these are not problems which exist only for the satellite countries. They also necessarily pose difficulties for the metropolitan countries as the demands of imperialism change. Therefore an increasing number of third world health measures are being undertaken in conjunction with international aid and development organisations — and sometimes by those organisations alone.

In the past, any aid to the underdeveloped world was given by individual capitalist countries to those third world countries with whom they had historical connections. However, since the war, and the unprecedented internationalisation of capital which has followed, there has been a shift towards multilateral aid which is clearly of benefit to capital as a whole. This applies to medical aid as it does to aid in general. Medical aid represents a minute percentage of health expenditure in most third world countries. (In Colombia, for example, from 1961-1965 'international assistance' averaged 1 per cent of all national health expenditure.) But because it is often in the form of technology, or tied to technological inputs, it strongly reinforces the capitalist/scientific paradigm of health. In addition, as we shall see, international capitalism is becoming increasingly worried about the 'population problem' and much medical aid is tied to an acceptance by the recipient country of some kind of population policy.<sup>58</sup>

There are three particularly significant examples of recent changes in health policy which will now be examined.

#### EXTENSION OF CURATIVE MEDICAL SERVICES BEYOND THE BOURGEOISIE

Where organised health facilities were lacking, international firms have always been ready to provide supplementary nutrients and subsidised dispensaries for their own workers. This role has now been assumed increasingly by third world governments in respect of their own employees, and sometimes for those in industrial employment. Various forms of pre-paid insurance and state subsidy have been adopted, with coverage varying from country to country, but rarely extending beyond the small urban proletariat. There are two reasons for





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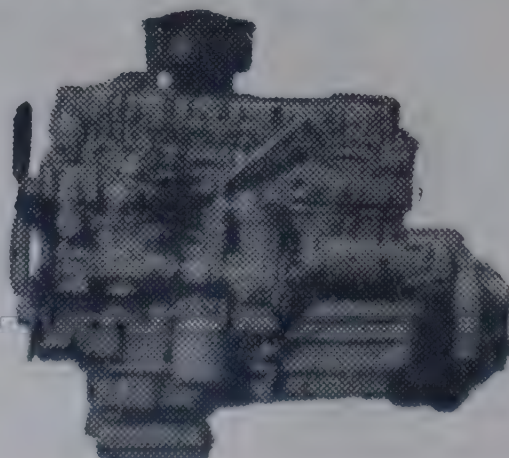
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his trend. On the one hand, in the small high technology sector of the economy with the most advanced mode of production, the *quality* of the labour force has become increasingly crucial.<sup>59</sup> The concept of 'quality' is usually associated with education and skills. However, health is obviously another important element of this quality, not just in terms of enhancing the effectiveness of the labour force, but also in adequately reproducing it where there is only a limited pool of workers with the requisite skills. On the other hand, such welfare provision can also be seen as an important means of social control and legitimation among the urban proletariat, in a manner similar to the welfare apparatuses of the advanced capitalist states. To these ends, a highly disproportionate amount of health expenditure is consumed by the skilled working class in the third world (in Colombia, once again, about 10 per cent of the population is covered by social security and consumes 50 per cent of all public sector health expenditure) at a time when imperialist investment favours the transfer of production to underdeveloped, relatively low-wage areas.

#### EMPHASIS ON POPULATION CONTROL

Most international aid and development organisations have become increasingly concerned with the question of population control over the past decade. At a time when the 'population question' is being presented as *the* crucial problem facing the world, investment in reproductive technology and budget allocations for family planning are growing at an ever faster rate, while aid as a whole is declining. As Oscar Gish comments, "On the part of donors there (has) been relatively little recent interest in aid to the health sector as such; in fact during the later 1960s the assistance which had previously gone into the health sector had largely been transferred to population programmes specially with regard to USAID".<sup>60</sup> It is clear that this emphasis on population control is in part due to the physical threat posed by population growth in the presence of continuing unemployment and poverty. In particular, the proliferation of sprawling shanty-towns inhabited by people with no material commitment to the economic systems represents a threat both to the capitalist world and to the indigenous bourgeoisie. In the third world today there is not just an industrial reserve army, but a permanently 'marginalised labour force' superfluous to the em-

ployment needs of capitalism.<sup>61</sup> In this context the myth of 'overpopulation' has succeeded in abstracting the issue of population growth from the international economic context in which it is located, and proposes a technical solution to what is only symptomatic of the real problems of third world development. Hence the activities of the international organisations in attempting to stop population growth in the absence of autonomous economic development, can be seen as attempts at social control rather than a solution to third world poverty.<sup>62</sup>

#### BEGINNINGS OF A PUBLIC HEALTH POLICY

We have already indicated that a central aspect of any attempt to solve the health problems of underdevelopment must be a public health policy. However, until very recently such policies have been almost totally ignored in favour of ever-more sophisticated Western medicine for the bourgeoisie. The only exception to this has been the adoption of 'heroic' policies by various international agencies against specific diseases — notably the WHO campaigns against smallpox and malaria. (Diseases such as these are primarily regarded as hazards for international air travellers.) While some of these campaigns have had limited successes, they have usually taken place in the absence of any effective clean water or sanitation policies.

Recently, however, there have begun to be signs of a shift in official health ideology among metropolitan governments and international agencies.<sup>63</sup> This new approach argues for environmental health policies for rural areas, the need for non-specialist primary health care personnel (the so-called 'barefoot doctors'), and even the need for socio-economic development as a prerequisite for health. Although there is, as yet, scant evidence of these policies being implemented, it is important to analyse why such changes are being advocated. Three basic issues are involved. First, the proven effectiveness of such measures in other underdeveloped areas (notably China) has been striking. (Incidentally, there is a widespread habit of selecting 'acceptable' and effective Chinese health innovations for praise, as though the achievements of the revolution were divisible.) International capital is anxious not to waste resources in the third world, either through counter-productive medical expenditures, or investment in non-health projects which may be

undermined by endemic disease. Secondly, it has now become clear that no effective population control policy can be implemented while the rural death rate remains so high among children. Finally, there is a genuine fear about the revolutionary potential of a seriously disaffected peasantry. Some form of environmental health policy, especially in rural areas, is therefore coming to be seen as a necessary investment.

Thus these new developments in health policy, being carried out jointly by the third world states and the organisations representing international capital, can be seen as rational responses to the new conditions appearing in underdeveloped countries, and to changes in the mode of their exploitation. However, in so far as these innovations may be seen from certain perspectives as progressive, it is important to reiterate as strongly as possible the central thesis of this article. That is to say, the nature of health and disease in the third world, and the medical response to these problems, can only be explained in terms of the relations of capitalist development on a global scale. To solve the health problems of third world populations in any long-term sense, necessitates the destruction of these relations of dependence, and thus in the final analysis the destruction of capitalism itself.

#### Notes

[This article is a considerably condensed version of two chapters of the authors' forthcoming book, "The Political Economy of Health", to be published by Pluto Press in 1977.]

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### Travancore Rayons

TRAVANCORE RAYONS experienced a long strike and had to suspend manufacturing operations for more than six months in 1975. It could produce only 893 tonnes of rayon yarn against the installed capacity of 3,300 tonnes. Similarly, production of cellulose film was 1,395 tonnes against installed capacity of 4,000 tonnes, cotton linter pulp 901 tonnes against 7,200 tonnes, sulphuric acid 4,411 tonnes against 18,288 tonnes and carbon-di-sulphide 777 tonnes against 3,210 tonnes. Net sales dropped from Rs 9.64 crores to Rs 5.33 crores and the outcome was a trading loss of Rs 12 lakhs against a gross profit of Rs 1.34 crores shown previously. After providing for depreciation, the loss increased to Rs 52 lakhs. No dividend has been recommended on preference or equity shares. Production of rayon yarn and cellulose film during the second half of the year was well maintained, but market conditions for the products remained depressed. Orders

have been placed with machinery suppliers for expanding capacity of rayon yarn by 800 tonnes per annum. With this expansion and modification of old spinning machines, under way now, the quantity and quality of production are expected to improve. Exports of cellulose film have been satisfactory, but internal demand has considerably come down due to high incidence of excise duty as compared with plastic films such as polyethylene PVC, etc. The company has taken up the matter with government. As regards rayon yarn, although a reduction in excise duty was announced in the last budget, the increase in excise duty levied in 1975 by partial transfer of the excise duty from powerloom art silk fabrics to viscose filament yarn has affected Rayons considerably, since the bulk of its production goes to the handloom sector, on whose output no duty is levied. The company has appealed to the government for relief in excise duty.



# Health Services and Population Policies

D Banerji

*The newly enunciated National Population Policy is a major deviation from the earlier policy of having a package of health, nutrition and family planning services as a part of the Minimum Needs Programme.*

*Moreover, even in this very diluted policy, there appears to be some selective emphasis in implementation. For instance, the coercive elements appear to be put into operation much more effectively than such elements as enlarging the education system for girls, strengthening the existing nutrition programme for pre-school children and creating mass mobilisation to ensure higher age at marriage for boys and girls.*

*Unfortunately, again, there is little evidence that anything new and refreshing is being thought of to make the existing health services more meaningful to the people of the country, particularly to people living in the rural areas.*

*If this trend continues, the National Population Policy will turn out to be yet another episode in the unfortunate saga of the efforts of the leadership of the country to bring about control of population growth without bringing about concurrent improvements in the levels of living of the masses, particularly those of the weaker sections of society.*

AMONG the Third World countries, India is in a reasonably comfortable position in terms of resources for providing health services to its population.<sup>1</sup> It had, in 1974, 185,017 doctors registered with the Medical Council of India. It has 105 medical colleges which bring out 13,000 graduates every year. The hospitals attached to these medical colleges have facilities not only for specialities, but also for highly sophisticated superspecialities. In all, there are 321,600 beds available in hospitals.

For rural populations, medical care facilities are provided through district and taluk/tehsil hospitals and through rural dispensaries. Also, a country-wide net work of primary health centres has been established, covering almost every community development block of the country, to provide integrated curative, preventive and promotive health services to the population of the block. In addition, a number of national programmes have been launched to deal with specific health problems. Malaria, smallpox, family planning and maternal and child health, leprosy, filaria and trachoma are some of the problems that are being handled on a nationwide scale as specialised mass campaigns. There are also national programmes for nutrition and for water supply and sanitation.

It is significant that despite all such programmes of the past 30 years which involved investment of considerable resources, India has the unenviable distinction of being one of the last countries in the world to have

eradicated smallpox. It still remains one of the few countries of the world where cholera breaks out in epidemic form. Over four-fifths of the mothers do not get even the most elementary obstetrical services from the community health organisations. Extensive problems of malnutrition and undernutrition are one of the results of the grinding poverty of the vast masses of the people. Extremely poor conditions of living — unprotected water supply and very poor conditions of general sanitation, housing and clothing are some of the other results of this pervading poverty. Such an ecological setting leads to very high rates of mortality and morbidity among the infants and children. The general population also continues to suffer extensively from such communicable diseases as malaria, tuberculosis, filaria, leprosy, tetanus, trachoma, dysenteries, enteric fevers, hookworm and other parasitic infestations.

Widespread prevalence of various types of health problems in India, in spite of considerable investment in health programmes, reflects what Karan Singh, Union Minister for Health and Family Planning, has described as the urban elitist orientation of the health services in the country. Health services are very disproportionately concentrated in the urban areas. They have a pronounced curative bias. The services that are offered to rural populations are not only grossly inadequate in a quantitative sense, but, much more importantly, the personnel who man the rural health services have a strong antipa-

thy for rural health work in particular and for the rural way of life in general.

An analysis of the social and political forces which have shaped the present health services system of the country provides an explanation for this paradoxical situation. After Independence, the health services system of the country was influenced by two key decisions of the new political leadership. Following the political commitments made during the struggle for independence, provision of health services to the vast masses of the people was made an important plank of state policy of the government of independent India. The other political commitment, which turned out to be much more sacred and of overriding importance, was to bring about the desired changes in the health services system without making any basic changes in the existing machinery of the government. This is a striking instance of what Gunnar Myrdal has termed as a 'soft state' attitude.

Following this soft state philosophy, the leadership of independent India fell back on the personnel of the Indian Medical Service of the British days to give shape to the new health services system for the country. These personnel, like those of the Indian Civil Service, belonged to the elite class of administrators. They were former officers of the British Indian Army who opted for civilian work. Professionally, they were trained in the British traditions.

Independence brought about two major changes which profoundly affect-



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ed the cadre of the Indian Medical Service. Firstly, the withdrawal of the British officers after independence caused a sudden vacuum in the ranks of the Indian Medical Services. This came as a windfall to a number of not-so-competent Indian officers, who were catapulted into positions of key importance simply because they happened to become senior in the cadre because of the very large number of vacancies caused by the departure of the British. Secondly, by adhering to the seniority rules, when the health services expanded very rapidly to meet the requirements of the newly-formulated health programmes, the administration drew more and more from the relatively small group of people who had entered the services in, say, 1930-35 or 1935-40 or 1940-45, to meet the very rapidly increasing manpower needs for key posts. As a result, a large number of the key posts in health services got filled by persons who, even according to colonial standards, were not considered to be bright.

Such a massive domination of the health services by men who were trained in the colonial traditions and whose claim to a number of vital posts in development administration was based merely on their being senior in the cadre, led to a virtual glorification of mediocrity, with all its consequences. What was even worse, such a setting was inimical to the growth and development of the younger generation of health workers.

#### FAMILY PLANNING POLICIES AND PROGRAMMES

The social and political forces which have shaped the present health services system of India have also influenced the family planning policies and programmes of the country, including the new programmes that have been put on the ground following the enunciation of the latest National Population Policy. In the fifties and the early sixties, at least there were efforts, however timid and ineffectual, to have the family planning programme in tune with the declared policy. The main components of the policy were:<sup>2</sup>

- (1) the community must be prepared to feel the need for the services in order that these may be accepted, when provided;
- (2) parents alone must decide the number of children they want

and their obligations towards them;

- (3) people should be approached through the media they respect and through their recognised and trusted leaders and without offending their religious and moral values and susceptibilities;
- (4) services should be made available to the people as near to their door steps as possible; and,
- (5) services have greater relevance and effectiveness if made an integral part of medical and public health services and specially of maternal and child programmes.

Predictably, the programme organisers looked up to western countries for help in formulating India's family planning programme. The clinic approach to the family planning which was adopted from early fifties was an imitation of the approach adopted by the Planned Parenthood Federation of the western countries. Commenting on this, Gunnar Myrdal has observed, "... in the main only one way of implementing the family planning was considered — the Anglo-Saxon, and more particularly American, way of setting up specialised clinics to advise women, individually, about suitable methods of birth control... The responsibility for slavishly following the Anglo-Saxon patterns in India should be placed less on the western expert advisors than on the upper class, westernised Indian planners. Their restricted view in this respect is another incidental example of the colonial legacy..."<sup>3</sup>

In the absence of a sound health and social and economic development programme, it is not surprising that the clinic approach had almost no impact on the problem. However, because of their soft state attitude, instead of taking note of the critical need for having an infrastructure of health and social and economic development services, the decision-makers once again sought guidance and light from abroad. Emphasis was on making family planning stronger and stronger so that it can finally 'lick' the problem of population explosion in India.

Once again, an 'imported' slogan, 'extension education', offered a convenient short-cut. An influential group of foreign consultants used all their powers of persuasion and prestige to

'sell' this idea. It found a ready market amongst Indian decision-makers. A chain reaction was initiated by the acceptance of this approach. People started making (a not very intelligent) imitation of the American approach to extension education. Requests went out for more consultants and a number of Indians got attractive opportunities for going abroad to get initiated into the new cult. Considerable amounts of resources were made available to create an elaborate machinery for the extension approach to family planning. It provided jobs to over 125,000 persons, mainly belonging to urban middle class families. The planners were so much taken in by this slogan that they did not even hesitate to declare publicly, in 1963, that the proposed goal was "to reduce the birth rate of India to 25 per thousand by 1973".<sup>4</sup>

The divergence between the declared policy and the actual programme became much more apparent and blatant after the failure of the extension approach. Monetary inducements were used to encourage touts to catch people for what are called family planning camps. Such a camp approach was used, again, at the instance of foreign advisors.

Hundreds of thousands of rupees were made available by the Indian Council of Medical Research and advice and guidance were sought from foreign consultants to conduct research on the Intra-uterine Device — the IUD. Unfortunately, however, this research was conducted mainly on "clinical" lines, which failed to provide information concerning important operational implications of using IUD on a nationwide basis. However, as a result of a massive promotion drive, again masterminded by foreign experts, which had the character of a mass drive to sell a new brand of toothpaste in the western market objections and doubts were swept aside and a virtual mass hysteria was built up in favour of the IUD. Enormous quantities of the resources of this very poor country were mobilised to strengthen the IUD programme. The United Nations Advisory Mission of 1966 dutifully endorsed this programme and hailed it as a "major breakthrough".<sup>5</sup> The programme, however, started crumbling within two years and it turned out to be a disastrous failure.





**'try  
to do**

ordinary things extraordinarily  
well. In this way all can  
participate in nation-building.

—Indira Gandhi

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LET US GET ON WITH THE JOB OF  
**NATION-BUILDING**

devp-76/37



Failure of the IUD led to application of more overt coercive measures through implementation of what has been termed as a "target-oriented and a time-bound programme". This involved (a) offer of monetary incentives to the doctors, the motivators and to the acceptors; (b) mobilisation of the law and order and tax collection machinery, sometimes using even the members of the police force for family planning work; and (c) exertion of administrative pressure on health and family planning and rural workers from other departments to ensure that they attain certain predetermined family planning targets. This too failed to give the desired results.

Adoption of the Mass Vasectomy Camp approach represented a high point in the escalation of the use of coercion, administrative pressure and monetary enticements in family planning. Under the leadership of the divisional commissioner and the deputy commissioner, the entire staff of a district, numbering in thousands, were threatened with dire consequences if they failed to attain certain family planning targets. These persons were let loose on the people and they were allowed to use (or misuse) all their powers and patronage to round up people for the mass camps. Unfortunately, despite taking recourse to such extreme measures, it was not possible to get any lasting results.

Throughout the past decades and a half the family planning programme was actively nurtured at the cost of the general health services, particularly in the rural areas. Preoccupation of the key administrators with family planning had led to the neglect of some vital segments of the health services. This neglect is not only in terms of denial of resources, but, perhaps much more importantly, because of the stepmotherly attitude of the policy-makers and programme-organisers towards the health services.

Significantly, the United Nations Advisory Mission of 1966 actively promoted this "separatist" trend (which, incidentally, was diametrically contrary to the declared policy of integration of family planning with the health services). Its report states:<sup>6</sup>

"The Directorate [of family planning] should be relieved from other responsibilities such as maternal and child health and nutrition. It is undoubtedly important for family planning to be integrated with maternal and child health in the

field, particularly in view of the loop programme; but until a family planning campaign has picked up momentum and made real progress in the states, the Director-General concerned should be responsible for family planning only. *This recommendation is reinforced by the fear that the programme may otherwise be used in some states to expand the needed and neglected maternal and child welfare services*" (emphasis added).

Failure of extensive use of the mass vasectomy camp approach indicated to the decision-makers that there was very little scope for further pressurising people into accepting birth control measures. This failure, in fact, impelled them to recognise, in early 1974, the need for concurrently improving the health and nutrition status of the people. This realisation also made them more aware of some other social and economic determinants of promotion of a small family norm — for example, education, employment and social justice, including an equitable status for women. About this time, the Planning Commission came up with a Minimum Needs Programme in the draft of the Fifth Five Year Plan to make "a frontal attack on poverty". The Minimum Needs Programme included the package of integrated health, nutrition and family planning services suggested by the Union Ministry of Health and Family Planning. 'Development Is the Best Contraceptive', becomes the new watchword of the family planning programme. Even as late as in January 1976, in the Report for 1975-76, the Union Ministry of Health and Family Planning asserted that.<sup>7</sup>

The year under review also happened to be the second year of the Fifth Five Year Plan which, for the first time, seeks to launch a direct assault on the problems of underdevelopment. High fertility rates have been identified as more a function of poverty than of anything else. The Family Planning Programme which is expected to tackle the problem of high growth rates of population has, therefore, been linked with the basic problems of poverty so that it is not run in isolation from social realities. As a social welfare programme, family planning is taken as a component of development. Hence, it is linked with the Minimum Needs Programme which has the basic aim of improving the quality of life of a large section of our people who have long remained victim of poverty and underdevelopment. In fact, Family Planning has been recognised as the 'inarticulate premise' which makes all the development efforts meaningful.

Implementation of this population policy required certain basic structural changes in the society so that it is possible to bring about a shift of additional resources and efforts to the poverty stricken sections of the society. This shift was required in almost all segments of the social and economic development programmes of the country. Specifically, within the limits of a Family Planning Programme, it required a virtual revolution, involving far-reaching changes in the entire system. This ought to have led to a total renovation of the entire decision-making machinery and a thorough rejuvenation of the entire machinery for implementing the programme, including the critical areas for education, training and research.

It soon began to be realised that the efforts needed to bring about such changes at the political, economic, bureaucratic and professional levels were very inadequate. This inadequacy became palpably apparent in implementing the Minimum Needs Programme of the Fifth Plan. Ironically, instead of giving substance to the concept of development as the best contraceptive, an effort was once again made to raise the bogey of population explosion to obtain another lease of life for the thoroughly discredited coercive methods to promote family planning. At one stage a very concerted effort was made to make a case for enforcing compulsory sterilisation on a nationwide scale of persons who have more than a prescribed number of children.

The systematic campaign to have further escalation of coercive tactics compelled the government of India to formulate yet another National Population Policy early in 1976. The government of India apparently was made to feel that the public was then ready to accept much more stringent measures for family planning than before. However, as the administrative and medical infrastructure in many parts of the country was still not adequate to cope with the vast implications of a nationwide campaign of compulsory sterilisation, they stated that they did not intend to bring in Central legislation for this purpose at least for the time being. States which were in a position to do so were allowed to go ahead. The National Policy also included proposals to further raise the age at marriage to 18 for



girls and 21 for boys, higher graded monetary compensation to individual acceptors and groups and a new multimedia motivational strategy. It also envisaged higher priority for girls' education up to the middle level and for child nutrition programme.

#### CONCLUSION

Obviously, the newly enunciated National Population Policy is a major deviation from the earlier policy of having a package of health, nutrition and family planning services as a part of the Minimum Needs Programme. Unfortunately, there appears to be some selective emphasis in its implementation even in this very diluted policy. For instance the coercive elements in the National Policy appear to be put into operation much more effectively than such elements as strengthen-

ing the education system for girls, strengthening the existing nutrition programme for the pre-school children and creating mass mobilisation to ensure higher age at marriage for boys and girls. Unfortunately, again, there is little evidence that anything new and refreshing is being thought of in making the existing health services more meaningful to the people of the country, particularly to people residing in rural areas. If this trend continues, the newly enunciated National Population Policy will turn out to be yet another episode in the unfortunate saga of the efforts of the leadership of the country to bring about control of population growth in India without bringing about concurrent improvements in the levels of living of the masses, particularly, those of the weaker sections of the society.

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★ What are 'Guesstimations'?

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★ Can one 'learn' to invent?

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# Health Manpower Strategies for Rural Health Services

## India and China: 1949-1975

Rushikesh M Maru

*This paper compares the health manpower strategies pursued in India and China and brings out the implications of these strategies for the birth control programme. The three key areas discussed are: training medical manpower, redistribution of health manpower from urban to rural areas and utilisation of practitioners of indigenous medicine.*

*The examination brings out that while the broad principles of Chinese rural health policy are relevant to India, the task of implementing egalitarian health policies through the existing elite system will not be easy.*

*The Chinese experience suggests that neither a general commitment to socialism nor concentration of power in the hands of a small political-administrative elite can become an adequate mechanism for major social changes. Only a leadership determined to restructure both attitudes and power relationships within the political-administrative system will succeed. Such a restructuring must involve, among other things, de-bureaucratisation and decentralisation of power to the people.*

INDIA and China began economic planning in the early 1950s from roughly similar resource bases. Both faced similar problems of poverty and population growth, but the solutions and the institutional strategies for social change and economic development have differed widely due to differences in social and political systems. India and China, therefore, provide not only theoretically interesting but empirically meaningful cases for analysing the relationship between social system variables and policy formulation and implementation. A comprehensive analysis of this relationship for health and birth control policies has been attempted elsewhere by the author.<sup>1</sup> The present paper has a limited purpose of comparing and contrasting health manpower strategies for rural health services in the two countries.

Since the early 1950s, similar health manpower issues have dominated policy debates in both India and China, largely due to the similarities of their problems and resources. In both countries, the initial stock of health manpower consisted of a small number of doctors trained in Western style medical schools, and a much smaller number of para-medical personnel. Even these limited health personnel were mainly concentrated in urban areas which contained only 25 per cent of the total population. There were large numbers of indigenous medical practitioners, but they were not integrated into the public health network. The goal of building a nation-wide health infrastructure within the shortest possible time required that the number of medical personnel be increased rapidly

and be distributed evenly between urban and rural areas. The strategies of manpower development and distribution can be grouped into three issue areas. First, the debate on training of medical manpower centred around quality versus quantity in education. Those who believed in quality advocated the concentration of limited resources on the expansion of high level medical education; others emphasised the need for rapid expansion of health manpower through a shortening of the length of medical training. The latter group also advocated the training of a large number of para-professionals with very limited training to undertake simple curative tasks in rural areas. Second, policies had to be devised to redistribute health manpower from urban to rural areas. Solutions had to be found to persuade urban health workers to settle in rural areas; at the same time, the number of para-professionals had to be increased to provide immediate health services to the rural population. Third, it was argued that indigenous medicine practitioners provided an additional health manpower resource, and therefore, they must be utilised in the regular public health network. This solution was opposed by many who believed that only modern scientific medicine should form the basis of health services.

We will describe the evolution of policies in each of these three issue areas, compare the health manpower strategies, and bring out the implications of these strategies for birth control programmes. As we will see in the following discussion, the mid-1960s marked a turning point in the evolu-

tion of health manpower policies in both countries. The Cultural Revolution (1966-68) in China initiated a number of new policies and forced a quantum jump in the diffusion of some of the existing policies. Although no such dramatic shift in policy occurred after 1965 in India, by late 1960s and early 1970s, new policies similar to those in China were gaining official recognition and support. It is, therefore, useful to divide our discussion into two different time periods: (1) the pre-1965 period (1949-65); and (2) the post-1965 period (1966-75). Apart from the convenience in analysing major policy shifts, such a division into time periods is also necessary because we do not have estimates of high- and middle-level medical manpower for the post-1965 period in China. For those not familiar with the structure of administration in China, we have outlined comparable levels of government administration in Chart 1.

### I

#### Pre-1965 Health Manpower Policies

##### TRAINING OF HIGH- AND MIDDLE-LEVEL MEDICAL MANPOWER

One of the first organisational tasks facing the new regimes in both countries was the training of a large number of medical personnel to staff rapidly expanding medical care institutions. India was slightly better placed than China in terms of its initial stock of high-level medical manpower. There were 56,000 Western medicine doctors and 29 medical colleges at the time of Independence from the British rule.<sup>2</sup> In 1949, on the eve of the communist

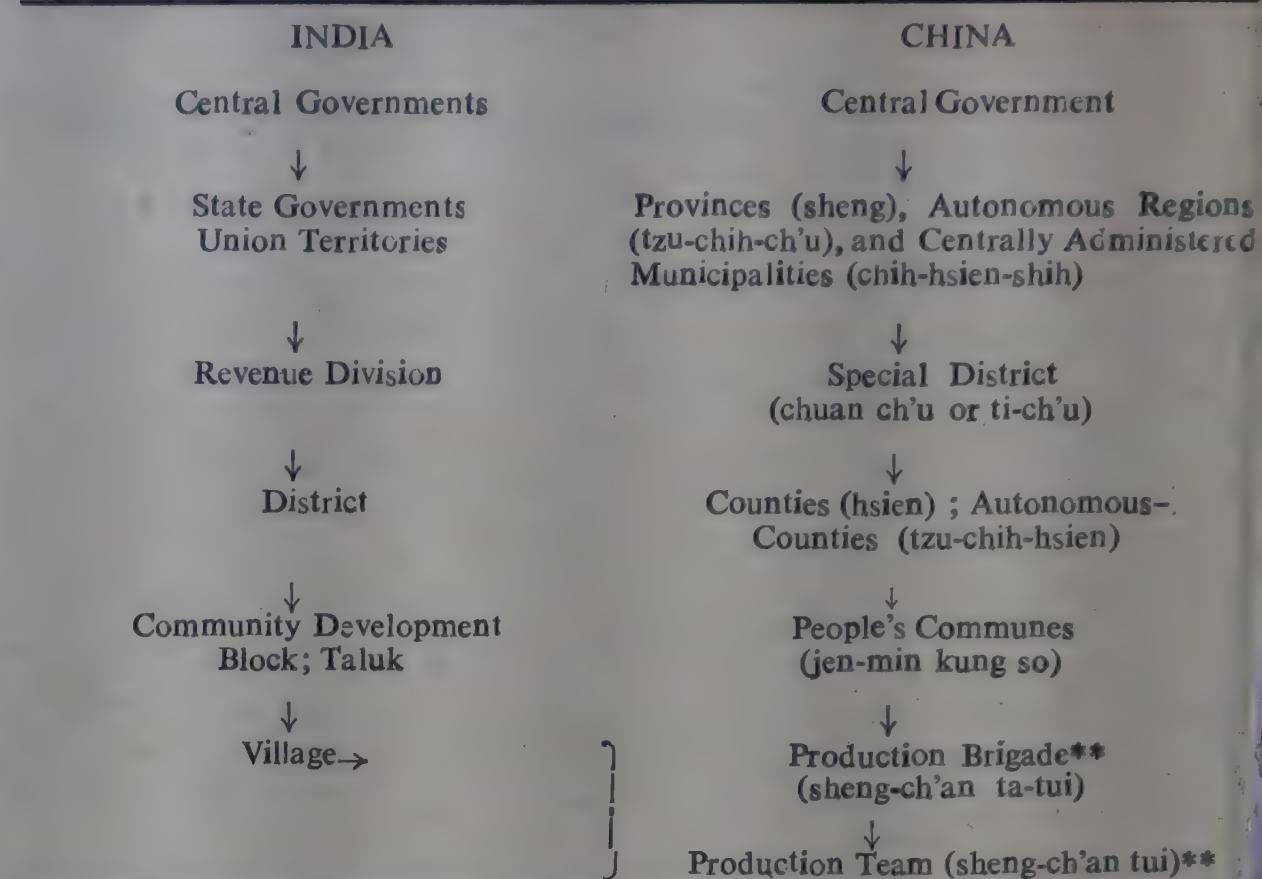


liberation in China, the estimates of Western medicine doctors varied from 12,000 to 41,000.<sup>3</sup> The doctor : population ratio in India was 1:6,400; and in China, depending on the estimate of total doctors, it could be anywhere from 1:45,000 to 1:14,000. In the next one and a half decades, both countries made remarkable progress in training high-level medical manpower. Medical colleges in India increased from 29 in 1951 to 87 in 1965-66; annual admissions to medical colleges also increased from 2,500 in 1950-51 to 10,600 in 1965-66, and to 11,800 in 1969-70.<sup>4</sup> We do not have reliable information about the number of medical colleges in China in 1949, but it was reported to be 48 by the end of 1957 and about 60 in 1962.<sup>5</sup> It is difficult to compare enrolment figures for India and China since the Chinese figures include dentists and pharmacists. Orleans estimates that the number of medical doctors increased from around 41,000 in 1949 to 150,000 in 1966. In India, the number of medical doctors increased from 56,000 in 1950-51 to 108,000 in 1964. The doctor : population ratios in the mid-1960s were 1:4,800 for China and 1:4,393 for India (Tables 1 and 2).

While the high-level Western-style medical education in India and China evolved on similar lines, there were significant differences in the extent and type of middle- and lower-level medical manpower, and in their policies toward the non-Western systems of medicine. A comparison of the estimates of various types of medical personnel presented in Tables 1 and 2 illustrate these policy differences.

Chinese leaders, under the guidance of their Soviet advisers, had placed greater emphasis on the development of vocational medical schools from the early 1950s. Thus, by the mid-1960s China had trained 170,000 'Assistant Doctors' who were given three years' training in higher secondary medical schools. There is no comparable category of medical personnel in India. Similarly, China was ahead of India in the number of nurses trained during the same period. The nurse : population ratio in China was 1:3,900 in 1966 as compared to 1:10,476 for India in 1964. However, the educational levels of nurses in the two countries are not comparable. A high school diploma or its equivalent is the basic requirement for admission to nursing school in India; but the Chinese nurses enter vocational schools after primary or junior secondary general school education. It might be more appropriate, therefore, to add

CHART : COMPARABLE LEVELS OF GOVERNMENT ADMINISTRATION IN INDIA AND CHINA



\* In some areas there is an intermediate level of government-district (ch'u) between special district and county.

\*\* There is no set pattern concerning the relationship between natural village in China and units in the commune system. In some communes natural villages are associated with brigades, whereas in others teams correspond to natural villages. For example, Crook found that while a commune in Honan Province had 38 brigades and 38 natural villages, another commune in Liaoning Province had 72 natural villages and 72 teams. (See Frederick W Crook, 'The Commune System in the People's Republic of China, 1963-1974', in 'China : Reassessment of the Economy', Joint Economic Committee, US Congress, Washington, July 1975, pp 376-77.)

up both the nursing and midwife categories and then compare total nursing personnel in the two countries. If we combine "nurses" and "nurse midwives" (Table 2), we get a total of 81,619 nursing personnel for India, which gives a nursing personnel : population ratio of 1:5,826. Similarly, combining the categories of "nurses" and "midwives" in Table 1, we get a total figure of 225,000 nursing personnel for China and a ratio of one nursing person for 3,222 population. This comparison of middle-level medical manpower clearly establishes quantitative superiority of China *vis-a-vis* India. Qualitative differences between the two countries do exist and, as indicated earlier, India has some advantage over China in this respect. It is difficult to measure the extent of qualitative differences in training. There are differences in requirements for admission to nursing schools, but the actual period of nursing education is about two years in both countries.

#### UTILISATION OF TRADITIONAL MEDICINE PRACTITIONERS

China has, from the very beginning made systematic attempts to absorb traditional Chinese medical practitioners

into the state-operated health care network. While the attempts to combine Western and Chinese medicine may not have resulted in a new theoretical synthesis of the two systems, there is no doubt that Chinese medical practitioners work side by side with Western-trained doctors in hospitals and rural health clinics. Many of them have been given brief training in Western medicine and then were sent to rural areas.<sup>6</sup> There are no systematic estimates of Chinese medical practitioners, but one official estimate places their number at around 500,000. This figure includes all gradations of personnel including those who have learned the art through apprenticeship. In India, we have two different estimates of practitioners of non-allopathic medicine; one gives a figure of 146,455 for 1961, and the other estimate places it at around 300,000 in 1972. I have taken a mid-point between these two estimates, which provides a 1964 crude estimate of 223,227 practitioners of non-allopathic medicine in India. These estimates do not show significant differences between India and China in terms of the number of traditional medicine practitioners per 100,000 population (Tables 1 and 2). However, given



TABLE 1 : ESTIMATED NUMBER OF MEDICAL PERSONNEL IN THE PEOPLE'S REPUBLIC OF CHINA, 1966

Type of Personnel	Number	Ratios*	
		Health Workers: 100,000 Population	Population: Health Worker
Graduates of schools of 'Western' medicine 'Higher-level' schools			
Doctors	150,000	21	4,800
Stomatologists	30,000	4	24,000
Pharmacists	20,000	3	36,000
'Middle-level' schools			
Assistant doctors	170,000	23	4,300
Nurses	185,000	26	3,900
Midwives	40,000	6	18,000
Dispensers	100,000	14	7,300
Total medical personnel (Western medicine)	695,000	97	1,043
Practitioners of 'Chinese medicine'	500,000	69	1,500
Total medical personnel (Western and Chinese Medicine)	1,195,000	166	607

\* Based on an estimated population of 725 million

Source : Victor W Sidel and Ruth Sidel, "Serve the People : Observations in the People's Republic of China", Boston : Beacon Press, 1974, p 25.

the crude level of these estimates, it would be unwise to read too much into these quantitative comparisons.

The most important difference between India and China lies in the extent of the utilisation of indigenous medicine practitioners. In China, traditional medicine practitioners were systematically absorbed within the state health network from as early as 1954 when they were brought into 'united clinics'. These united clinics were mainly in rural areas and consisted of existing private practitioners of both the traditional and Western medicine. By 1957, there were more than 50,000 group practice clinics in the countryside. Also, about 20,000 traditional doctors had joined regular governmental health services.<sup>7</sup> The commune clinics organised during the Great Leap Forward in 1958-59 were based on these united clinics and, therefore, continued to utilise traditional doctors for rural health service.<sup>8</sup> In India, the Central government was unable systematically to bring indigenous practitioners into the public health network due to opposition from the medical professionals. However, as a result of the encouragement given to the traditional systems of medicine by some state governments, 6,469 dispensaries of traditional medicine were established by 1960.<sup>9</sup> But, these dispensaries were not a part of any nationwide policy of systematically absorbing traditional medicine practitioners into the government health centres in rural areas.

#### URBAN-RURAL DISTRIBUTION OF HEALTH FACILITIES

The rapid growth of medical person-

nel did not bring health care within easy reach of the vast masses in the rural areas. The rural sector accounts for 80 per cent of population in both countries, but only about 30 per cent of the medical personnel were available to

rural clinics and health centres. In 1961, 67.3 per cent of allopathic doctors<sup>10</sup> and 51 per cent of nursing personnel<sup>11</sup> were concentrated in urban centres in India which covered only 17 per cent of the total population. Medical personnel were also concentrated in urban areas in China during the mid-1960s. Mao Tse-tung, in his famous 'June 26 Directive' in 1965, indicted the Ministry of Health for rendering "service to only 15 per cent of the nation's population".<sup>12</sup> The *Red Guard Bulletin* which first published Mao's directive also attacked the Health Ministry's leaders for retaining 'some 120,000 of the 180,000 high-ranking skilled personnel of the nation in the cities'.<sup>13</sup> This gives a rough estimate of the extent of rural-urban maldistribution of health manpower in China which was roughly similar to that in India.

Let us briefly recapitulate the state of medical manpower development and distribution in India and China during the pre-1965 period. First, both countries followed similar policies in the training of high-level medical manpower which resulted in the rapid growth of

TABLE 2 : MEDICAL PERSONNEL IN INDIA, 1964

Type of Personnel	Number	Ratios*	
		Health Workers: 100,000 Population	Population: Health Worker
Doctors of Western system of medicine	108,240**	23	4,393
Dentists	8,386	2	56,702
Pharmacists	70,628†	15	6,732
Nurses	45,387	10	10,476
Nurse Midwives	36,232††	8	13,124
Total medical personnel (Western Medicine)	268,873	58	1,768
Practitioners of 'Other' medical systems	223,227*†	47	2,130
Total medical manpower (Western and other)	429,100	105	966

\* Based on estimated mid-year population of 475.5 million.

\*\* This figure includes 51,052 licentiates with three years of medical school training after high school. Such courses were stopped after Independence, and most of them were given an opportunity to upgrade their training through one or more years of condensed degree courses.

† This figure is for 1965 and includes all those who listed their occupation as a pharmacist irrespective of level of education.

†† This figure includes Auxiliary Nurse Midwives (ANM), Midwives, and Lady Health Visitors (LHV).

\*† Estimated. The 1961 census estimate is 146,455 non-allopathic medical practitioners. IAMR, "Stock of Doctors in Non-Allopathic Systems of Medicine", December 1967, p 19). Another recent estimate places the figure for 1972 at 300,000 ("National Health Scheme for Rural Areas : Proposal of the Union Ministry of Health", *Journal of Indian Medical Association*, 60:2, January, 6, 1973, p 76). The 1964 figure is estimated mid-point between these two figures for 1961 and 1972.

Sources: Doctors of Western Medicine: ICMR, "Stock of Allopathic Doctors in India", September 1966, pp 69-70.

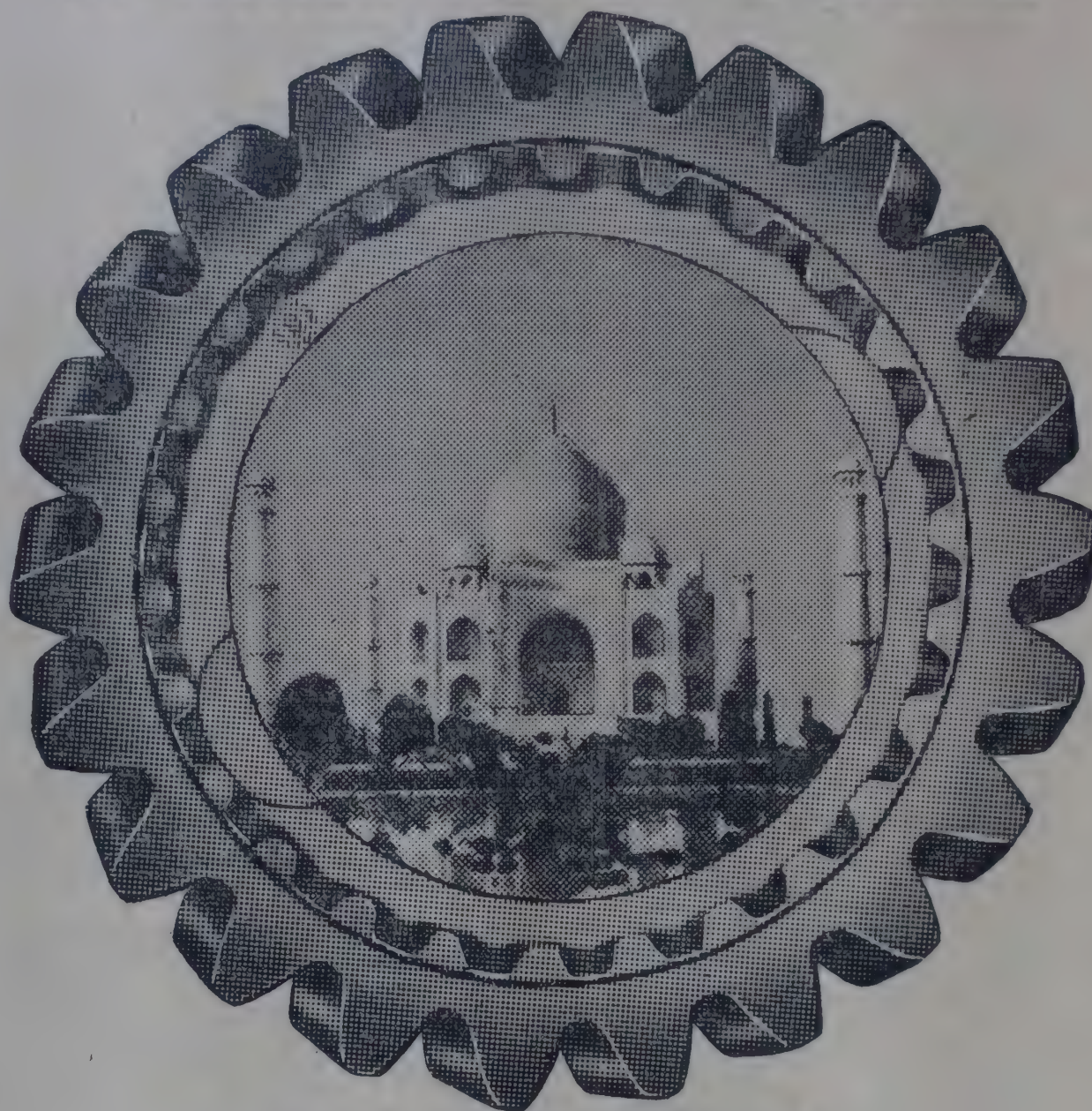
Dentists: ICMR, "Stock Taking of Dental Personnel in India", September 1966, p 13.

Pharmacists: "Health Statistics of India", 1965, pp 203-208.

Nurses and Nurse Midwives: ICMR, "Stock of Nursing Personnel in India", September 1966, p 59.



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Western-type medical doctors. Both countries had about the same doctor: population ratio in the mid-1960s. Second, China placed greater emphasis on the training of middle-level medical manpower from the very beginning and remained ahead of India in 1965. Third, while integration of indigenous systems of medicine with the Western system was not realised in either country, China was better able than India to absorb the Chinese medicine practitioners into the regular health care network. Finally, more than half of skilled medical manpower remained concentrated in the urban sector in both countries.

## II

### Post-1965 Health Manpower Policies

The post-1965 developments in China were initiated at the highest level by Mao himself on June 26, 1965, when he issued an important directive concerning health services. This directive, later known as 'June 26 directive', attacked the existing health policies of the Chinese Ministry of Health.<sup>14</sup> The extraordinary nature of developments in China since 1965 makes it difficult to discuss each policy issue separately as was done in the previous section. The following discussion will, therefore, be organised by country.

#### CHINA

Mao's 'June 26 Directive' laid the basis of the post-Cultural Revolution health policy. He defined the problems, suggested new policy guidelines, and triggered a revolutionary struggle to achieve his goals. What were the main issues raised by Mao? What kinds of changes were advocated by him? The following quote from Mao's 'June 26 Directive' clearly reveals the intensity of his feelings on health care issues and the scope of his criticism.

You may tell this to the Health Ministry. That Ministry renders service to only 15 per cent of the nation's population, and in this 15 per cent, mainly people of some position and rank. The Health Ministry does not belong to the people. It should better be renamed the Urban Health Ministry, or the Lords' Health Ministry, or the Urban Lords' Health Ministry instead.

Reform is called for in medical education... It is not necessary to have senior middle or junior middle school graduates as qualified students of medicine; a three years' course to primary school graduates will suffice for our purposes... The methods of detection and treatment of diseases,

at present in use in hospitals, are actually not suited to the rural villages.

Vast manpower and material resources are committed to the research on so-called 'peak' problems... but little or no attention is paid to the prevention... of common diseases.

Another odd phenomenon is the wearing of mouth masks by doctors in examining patients regardless of their complaint... Why can't there be any discretion in the matter? It creates a barrier between doctors and patients.

Only some doctors who have been out of college for one or two years and are not extremely proficient should be left behind in urban hospitals...<sup>15</sup>

Mao realised that only a thorough reorientation of health care organisation, education, research, and the doctor-patient relationship could make the system responsive to the needs of the common man. He also singled out the highest level of health leadership for attack. This was because Mao was not raising these issues for the first time; he had been pleading for such reorganisation since 1949. However, there was strong resistance to Mao's views from professionals in the China Medical Association, the Ministry of Health, and a powerful group within the Party. Thus, by the mid-1960s Mao was convinced that an all-out war on the health leadership within the Ministry was a prerequisite of any radical change. Most medical colleges and schools were closed from 1967 to 1970. The Minister and all the six Vice Ministers of Health came under attack by the Maoist radical groups. According to Lucas, the Health Ministry came under attack as a 'target' bureaucracy, with some 16 Ministry officials reported criticised between February and August 1967, for conspiring to sabotage county and district (ch'u) organisation.<sup>16</sup> The top leadership of the Ministry was completely purged and a new leadership took over at the beginning of 1968.

The preceding brief outline of the events which led to change in policies is intended merely to serve as a background for the following description of the policy consequences of the Cultural Revolution. We propose to describe major changes in the four areas of health manpower policy in China.

(1) *Formal Education*: The length of medical college training has been shortened from five to six years to about three years.<sup>17</sup> Some pre-Cultural Revolution courses were eliminated because they were considered unnecessary for a physician (i.e., higher mathematics). The content of the curriculum also

underwent changes, increasing the time spent in actual medical practice and reducing theoretical learning. About one-third of the teaching time is spent in the countryside where students learn from their professors in actual rural conditions.<sup>18</sup> Professors and students are required to treat peasants during their stay in rural areas. Compared to pre-1966 medical education, the post-Cultural Revolution education places greater emphasis on both preventive and Chinese medicine.<sup>19</sup> Entrance requirements have also changed in keeping with revolutionary ideology. Prior to the Cultural Revolution, most students were graduates of senior high school and were selected for their academic achievement. Since the Cultural Revolution, the tendency is to be more flexible in initial school education requirements, as many junior high school graduates are also admitted. The admission procedure is by recommendation and selection. For example, every school graduate works for two years in a factory or commune, and then applies to his own work unit for admission to medical college. After the leadership and the masses in his work unit have supported his application, the university makes its own assessment. Finally, the student is selected on the basis of four criteria: two years of labour after school; political consciousness and class background; as least a junior high school education; and the age of about 20 years, health and unmarried status.<sup>20</sup>

(2) *Community-Based Lower-Level Medical Workers*: While high- and middle-level medical personnel are trained in regular schools, many other modes of training are used to expand rapidly the number of lower-level field workers, such as 'barefoot doctors' and 'health workers' in production brigades and teams. The barefoot doctors are selected by the local communities from among their own members. They may be young peasants, traditional medicine practitioners, or urban youths permanently settled in rural areas. They are initially trained for about three to four months, and then sent back to their own communities where they treat common diseases, dispense both Western and Chinese drugs, supervise health workers in their public health tasks, and provide family planning services.<sup>21</sup> After a year or two, many of them go through another round of short training to upgrade their medical knowledge. Thus over a period of four to five years, every barefoot doctor is expected to undergo a minimum of one-year's training. The health workers are trained for only one to three



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months. Both these categories of field workers continue to do part-time farm labour and receive work-points like any other able-bodied peasant. It is estimated that there are about three million health workers or one public health worker for 215 population.<sup>22</sup>

The barefoot doctors and public health workers are trained by various methods: mobile medical teams, regular medical schools, internship in commune clinics and country hospitals, half-farm half-study schools,<sup>23</sup> and occasionally by senior barefoot doctors. The People's Liberation Army (PLA) also was mobilised to train barefoot doctors and help brigades to establish co-operative medical care. Since the beginning of the Cultural Revolution, PLA medical departments have trained 370,000 barefoot doctors.<sup>24</sup> Recently some medical schools have started correspondence courses to help train urban youths settled in rural areas.<sup>25</sup> The quality of training varies considerably from region to region and even within each region.

(3) *Transfer of Manpower Resources to Rural Areas:* While barefoot doctors and health workers are able to provide basic health care to every production brigade, their competence is limited and they need to be supported by better-trained physicians. Such technical support and training is provided either by permanent settlement of urban doctors in the countryside or by sending mobile medical teams for periods of three months to one year. These mobile teams perform major surgical operations, distribute contraceptives, train barefoot doctors and health workers, and also supervise rural health work.<sup>26</sup> One-third of urban hospital personnel are reported to be touring the countryside in mobile teams.<sup>27</sup> Lucas catalogued 61 reports between 1957 and 1967 of intended rural destination of urban medical assistance. She calculated the average distance between the rural destination and the nearest provincial source of urban medical service. When this average distance was compared with the average miles travelled by urban medical personnel to known rural destinations, she found that far less than one-half of China's rural villages were served by urban medical personnel.<sup>28</sup> However, Lucas' analysis covers the pre-Cultural Revolution period and the first two years of the Cultural Revolution when the Health Ministry was still led by medical professionals. How far this situation has changed since 1967 is anybody's guess. One recent Chinese source claims that "rural areas now account

for more than one-half of China's professional medical workers and medical appropriations".<sup>29</sup>

(4) *Policy Toward Traditional Chinese Medicine:* The efforts to integrate traditional medicine with Western medicine were intensified after the Cultural Revolution.<sup>30</sup> This revived prominence for traditional medicine is seen in exhortations in the Chinese press for the cultivation of traditional herbs in communes to meet increasing demand for medicine in rural areas, and to reduce costs. The barefoot doctors' curriculum includes learning about traditional medicine, and they carry both traditional and Western drugs in their medical bags. There are also reports of increasing popularity of combined treatment of diseases using both kinds of medicine. The traditional medical doctors form an important part of the commune health team.

One recent Chinese source claimed that over 30,000 medical workers trained in Western medicine have taken courses ranging from six months to two years in traditional medicine. This is seven times the number up to 1965.<sup>31</sup> This may be considerable progress relative to the pre-Cultural Revolution situation, but in absolute terms it is not very significant. The 30,000 Western medical personnel trained in Chinese medicine constitute less than 10 per cent of total doctors and assistant doctors, and less than 5 per cent of total higher- and middle-level personnel in Western medicine. Orleans,<sup>32</sup> Croizer,<sup>33</sup> and Unschuld<sup>34</sup> have observed that the Chinese regime's goal of developing a true synthesis of Chinese and Western medical theory and education may remain for a long time an unfulfilled objective. In practice, it seems that the Chinese medicine will continue to be employed side by side with Western medicine until the time China is able to provide adequate allopathic medical care in rural areas.

#### INDIA

While developments in India during the latter part of the 1960s have not been quite as dramatic as in China, there has been a gradual but marked development of rural health services through a network of Primary Health Centres (PHC). India is divided into 5,265 Community Development Blocks, which are the basic units of integrated rural development. Primary Health Centres are located at the headquarters of the Block. There were 2,800 PHCs in 1960-61, which covered approximately one-half of the Blocks. By the end of

1971, the number of PHCs doubled to 5,131 and covered nearly 95 per cent of the blocks.<sup>35</sup>

There has been considerable progress in medical education and training of paramedical personnel. Between 1960-61 and 1973-74, the number of medical colleges increased from 57 to 102; annual admissions from 5,800 to 13,000; stock of doctors from 70,000 to 137,930; stock of nurses from 27,000 to 88,000; and the stock of Auxiliary Nurse Midwives and Midwives from 19,900 to nearly 70,000.<sup>36</sup>

The rapid growth of medical facilities and manpower did not alter the rural-urban imbalance. A recent Ministry of Health document estimates that "the qualified medical manpower in the country is distributed in the ratio of 66:33 among the urban and rural areas".<sup>37</sup> This probably refers only to graduates of medical schools. We do not have any recent estimate of rural-urban distribution of middle- and lower-level medical personnel, but there are reasons to believe that they are more equally distributed than the doctors. First, most of the paramedical positions created since 1963 have been in rural areas. Second, even in 1961 the distribution of nursing personnel between urban and rural areas was in the ratio of 51:49.<sup>38</sup>

The PHCs were originally expected to cover a population of 60,000 to 80,000. However, due to growth in population, the PHCs and their subcentres are able to give effective service to only about one-third of the population in the vicinity of their headquarters. It was estimated that there would be 137,000 medical doctors available by the end of the Fourth Five-Year Plan in 1973-74, which gives a doctor: population ratio of 1:4,100. As can be seen from Table 3, in 1971-72 the ratio of middle- and lower-level medical personnel to population was approximately 1:2,900.

Our comparison of pre- and post-1965 medical manpower indicates remarkable continuity in policy. The main concern was with increasing the stock of manpower; and this was achieved through expansion of medical colleges and paramedical training institutions. Thus, formal fulltime education has remained the most important method of training additional medical manpower.

It is only in recent years that a serious public debate on medical manpower policy has pressured the government to initiate some policy changes. In the pre-1965 period, the Central Health Ministry was not enthusiastic about the



development of indigenous systems of medicine. However, since the late 1960s this attitude has undergone substantial change. A Central Council of Research in Indian Systems of Medicine was established in 1969. A similar Council for Homeopathic Medicine was also started in 1974. This recognition of the non-Western medical systems also was reflected in the Central Health Ministry's "National Health Scheme for Rural Areas" proposed in 1972. It openly admitted that "in spite of the best efforts all these years to augment the medical facilities in rural areas, these areas are still lagging far behind the urban areas in the matter of medical relief and care". As modern allopathic medicine is costly and the doctors are reluctant to go on to the rural areas, the Ministry proposed a scheme to absorb 300,000 registered medical practitioners (both qualified and unqualified) in the rural health service. These are private practitioners of the Indian system of medicine, homeopathy, and unani trained in schools or through apprenticeship. The Ministry proposed to train these practitioners of non-allopathic medicine for four months and then place them in rural sub-centres, each serving about 2,000 population or three to four villages. These rural doctors will carry with them medical kits that would contain both allopathic and non-allopathic medicines. A pilot project in 29 districts was undertaken in 1971-72.<sup>39</sup> However, it should be noted that this scheme has not been implemented so far.

The Union Ministry also plans to improve the utilisation of existing paramedical personnel in the regular rural health centres through a multipurpose health workers scheme.<sup>40</sup> Under the latter scheme nearly all the functionaries in the PHCs will be given multiple duties in public health, family planning, and maternal and child care. Although at present there is partial integration of MCH and family planning in the duties of Auxiliary Nurse Midwives, most of the other workers are concerned primarily with special functional areas of public health, sanitation, vaccination, malaria work, or family planning. Table 3 presents figures for various kinds of health, MCH, and family planning field workers for 1971-72. If all these workers are assigned multiple tasks, it will help to improve the worker:population ratio for each task. It will also help to better integrate family planning with health care. Under the multipurpose health worker scheme, there will be 203,415 field

TABLE 3 : FIELD WORKERS IN HEALTH AND FAMILY PLANNING PROGRAMME IN INDIA : 1971-72

Type of Personnel	Number	Ratios*	
		Field Workers : 100,000 Population	Population Health Worker
MCH (Maternity and child health) workers**	77,687	14	7,053.
Public Health Workers	110,395	20	4,963
Total MCH and public health workers	188,082	34	2,913
Family planning education workers †	15,333	3	35,733
Total field workers (health, MCH and FP)	203,415	37	2,694

\* Based on 1971 population of 547.9 million.

\*\* Besides nurse midwives and lady health visitors, this category includes *dais*—traditional midwives—recruited and trained by the government.

† While all field workers have part-time responsibility for family planning, the "Family Planning Education Workers" devote full-time to education, communication work.

Sources : For 30,000 dais included under 'MCH' category, see The Fourth Five-Year Plan 1969-74 : Draft (1969, p 291).

All other figures are derived by regrouping data presented in the "Report of the Committee on Multipurpose Workers under Health and Family Planning Programme", Ministry of Health and Family Planning, Government of India, New Delhi, 1973.

workers or one field worker for 2,700 population. If the Health Ministry's "National Health Scheme for Rural Areas" is revived and implemented, it would add another 300,000 practitioners of non-allopathic medicine to existing health workers, and bring the total number of multipurpose health workers to about 503,415, or one such medical worker for 1,088 population.

#### COMPARATIVE REVIEW

We have separately reviewed health manpower policies for India and China. We would now like to present a comparative view of the two countries.

Since the mid-1960s China has made some fundamental changes in all the aspects of training and deployment of health manpower in rural areas. In regular medical education, the curriculum has been shortened; its content has been changed to emphasise preventive and Chinese medicine; learning through practice in actual rural conditions is promoted. In India, until the end of 1975, there have been no major departures from the pre-1965 educational system, except for two minor changes in the content of the medical curriculum: (1) an increase in the number of hours spent on social and preventive medicine; (2) three months' internship in rural clinics. These have not been adequate to reorient the medical education for rural health care.<sup>41</sup> In contrast, Chinese medical students spent one whole year in the countryside. If the mobile medical

hospital scheme is fully implemented in India, it would help to increase the period of learning in rural conditions. There are also differences in criteria for admission to medical schools. Chinese students are selected by an elaborate procedure which assures the selection of candidates suitable to rural work in terms of socio-economic background, experience, and motivation. The Indian system favours high middle-class urban youths who are neither inclined nor prepared by previous experience to work in rural areas. Academic merit still remains the only criterion for entrance to medical schools in India.

At the middle and lower levels of medical care, the number of health personnel have tremendously increased in both countries. China has a definite advantage in this respect because of the growth of barefoot doctors and health workers. The barefoot doctor: population ratio is approximately 1:763, and the health worker: population ratio is 1:265. These workers cannot be compared with rural health workers in India who are far better trained than their Chinese counterparts. Also, while the Indian health workers are full-time functionaries, their Chinese counterparts are peasants who spend part of their time on health work. We may take into consideration these differences by roughly equating one Indian field worker to two Chinese barefoot doctors/health workers. Even after allowing for these adjustments, China has more



health workers per population than India. As against the adjusted barefoot doctor: population ratio of 1:1,526 and health worker: population ratio of 1:530, the Indian ratio of health worker to population is 1:3,000. If the recent policy proposals in India regarding utilisation of practitioners of non-allopathic medicines are implemented, there will be approximately one health worker for 1,088 population. This would largely bridge the quantitative gap between India and China in rural middle- and lower-level health manpower.

China has been able rapidly to cover every brigade with barefoot doctors and health workers due to multiple strategies of training such as mobile teams, half-farm half-study schools, regular middle-level public health schools, in-service training at various levels, and correspondence courses. India mainly has depended on regular middle-level training institutions. The Chinese have been more flexible than their Indian counterparts in applying formal educational criterion for admission to paramedical courses. China has also used the 'echo principle' in training, which essentially means that health functionaries at each level should train workers at the next immediate lower level.<sup>42</sup> Lack of standardisation and poor quality are the two most important shortcomings of the Chinese paramedical training. But this may be a short-term problem because barefoot doctors' skills are continually being upgraded every year or two through repeated rounds of further training. In this way, at the end of five years each barefoot doctor will have acquired a minimum of one year's training.

Both India and China have encouraged the development of indigenous medical systems. But China has vigorously pursued this objective and extensively utilised practitioners of traditional Chinese medicine in rural health care. This has helped to augment health manpower and reduce the cost of medical care. In India, the medical profession has so far successfully resisted any attempts to bring non-allopathic medicine practitioners into the regular health care network. This may soon change under the new policy of the new government, but we cannot be certain. No action has been taken since 1972 when the Union Ministry first proposed to bring non-allopathic practitioners in rural health service.<sup>43</sup>

The Indian government also has started a new scheme of mobile hospitals for rural areas. As an experimental project, 23 mobile medical hospitals were

attached to medical colleges in 1971. These mobile hospitals are fully equipped and have 50 beds for in-patient care.<sup>44</sup> These hospitals are designed to provide modern medical care in rural areas and train medical students under rural conditions.<sup>45</sup> Again, this scheme has so far not become an integral part of the national health policy.

In the wake of an armed conflict with Pakistan in 1971, the government introduced a "National Service Bill" in Parliament, approved in May of 1972. The Bill provides that any "qualified person" under the age of 30 shall be liable to be called up to perform "national service" for a period not exceeding four years. National service is defined as "any service which is likely to assist the defence of India or civil defence or the efficient conduct of military operation" and "such social services as the Central government may ... by notification, specify". The statement of Objects and Reasons appended to the Bill mentions "difficulty in recruiting engineers and doctors for programmes such as family planning, health schemes in rural areas and construction projects in remote areas", as one of the reasons for introducing the Bill.<sup>46</sup> As far as we know, these powers have not been used so far.

Both India and China have found it difficult to persuade urban doctors to settle permanently in rural areas. Even in China where the government assigns jobs to every college graduate, and where dissenting leaders of the medical profession and the Party were purged during the Cultural Revolution, it has not been possible radically to alter the distribution of high-level medical manpower in favour of the countryside. What has been achieved is a primary health network built from local resources supplemented by part-time rural assignments for urban doctors and mobile medical teams. The Chinese also have developed a unique referral chain from commune clinics to the country hospitals, as well as a linkage system in which all advanced medical colleges and hospitals are systematically made responsible for certain backward geographical areas. For example, the major medical colleges despatch mobile medical teams to the backward provinces. There are a number of models of such linkage (kua-kuo) systems, but, generally, each special district forms a linkage system. "Each of the major hospitals is assigned a number of rural countries and assumes the responsibility for expanding and strengthening the medical resources of the latter."<sup>47</sup> Such a

systematic network of linkages between urban and rural health institutions compensates for the lack of a permanent transfer of high-level medical manpower to the rural areas. At the same time, it optimises the use of scarce highly qualified manpower resources.

The Indian government recently has formulated the policy of requiring medical colleges to look after Primary Health Centres and provide referral and special services.<sup>48</sup>

### III

#### Manpower Policies for Birth Control Programme

India and China have chosen to integrate birth control programmes with health care organisations.<sup>49</sup> In both countries birth control services are provided by health functionaries. Thus, the health manpower development has become one of the important determinants of the spread and effectiveness of birth control programmes. What are the implications of health manpower policies outlined in the previous section for birth control?

First of all, the number and distribution of health manpower should be considered. As China has achieved better results than India in this respect, the Chinese health system is better equipped to provide birth control services at the grass-roots level. Second, depending on the methods of birth control used, skill and training of health personnel becomes important. The growth of high-level medical manpower has been similar in both countries, and the doctor: population ratios also are comparable. Both countries face shortages of college-trained doctors. As India has relied heavily on clinic-based methods of IUD and sterilisation, the availability of doctors has remained a major bottleneck. This is particularly acute for female doctors. China has some advantage in this regard because of the better availability of assistant doctors for the commune clinics. It is difficult to compare the availability of female doctors in India and China, but there is some indirect evidence to suggest that this may be better in China. In 1964, out of the total number of 108,240 doctors in India, only 12,339 were women doctors.<sup>50</sup> We do not have similar national statistics for China. A few travellers' reports indicate that in some medical schools, female students constituted about one-third of the total.<sup>51</sup>

Given the shortages of high-level medical manpower, different organisational strategies were adopted to



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improve the utilisation of existing resources. For example, China has increasingly emphasised non-clinical methods, such as late marriage and oral pills. India did not shift to non-clinical methods, but placed greater stress on vasectomy, which requires less skills and hospital care than female sterilisation. Vasectomy has also an added advantage of being a male method. In rural areas where male doctors are relatively easier to recruit than female doctors, vasectomy is more appropriate than female methods, such as tubectomy and IUD.

Apart from changing the relative mix of methods, both countries have relied heavily on mobile teams for providing birth control services. In China, birth control is one of the many tasks assigned to mobile medical teams. In India, mobile sterilisation units are created in 1964. In 1966, this scheme was extended to IUD. One mobile sterilisation unit and one mobile IUD unit were established for a population of 500,000 to 750,000. Since September 1967, these units also carry general medicine for emergency medical relief. As of March 1973, there were 399 sterilisation units and 456 IUD units. Since then a number of these units have been closed down due to poor performance and extension of sterilisation and IUD services through regular health organisation. There were 321 units functioning in the country during 1975-76.<sup>52</sup>

The shortage of trained physicians can be relieved by training paramedical workers to perform sterilisations and to insert IUDs. The Indian health leadership has until very recently maintained that only a fully-trained physician should be allowed to do operations and insert IUDs. This view was strengthened in the late 1960s when a sudden drop in the acceptance of IUDs was attributed to complaints of bleeding, pain, and other side-effects in a large percentage of women. During 1975, it was decided that properly trained selected nursing personnel may be allowed to do IUD insertions.<sup>53</sup> The Chinese barefoot doctors and mid-wives distribute conventional contraceptives and oral pills, but cases of sterilisation and IUD are generally referred to commune or county hospitals. However, in remote areas paramedics have been trained to insert IUDs.<sup>54</sup>

As birth control programmes were expanded to rural areas, a large number of medical and health personnel had to be trained for the new task. In China, mobile medical teams were used

to train most rural medical personnel.<sup>55</sup> Birth control was included in the curriculum for the training of barefoot doctors.<sup>56</sup> The higher level doctors were trained through short-term in-service training at hospitals and medical schools. Travellers' reports and articles in Chinese biomedical journals describe general health training, but rarely discuss training for birth control. It is, therefore, impossible to assess the quality of birth control training and the proportion of various types of health personnel trained. Given the official policy to shorten all medical training, it is realistic to assume that both the duration and the quality of birth planning training is not better than that in India.

In India, birth control training is given through a number of different organisational channels. It is included in the regular curriculum of medical colleges and nursing schools. But most of the medical personnel and extension education workers are trained in 44 Regional Family Planning Training Centres and in 16 Regional Family Planning Field (Mobile) Units. There are five Central Institutes which impart training to trainers, i.e., those employed in the regional training centres and key personnel working at the state and district levels. Family Planning training is also imparted in 330 ANM Centres, 21 LHV training centres and 291 general midwives training centres. The Indian Medical Association conducts a series of courses for private medical practitioners.<sup>57</sup> India has, therefore, utilised regular training institutes, mobile teams, and part-time in-service courses for birth planning training. In most cases, the duration of training ranges from a few days to a month.

While there is virtually no information on quality of birth control training in China, we know more about Indian training programmes because they have been evaluated by the UN Advisory Mission,<sup>58</sup> the Planning Commission,<sup>59</sup> and Parliament's Estimates Committee.<sup>60</sup> These evaluation reports found that a large percentage of the programme staff have not been trained, and of those who have, many have attended only short courses.<sup>61</sup> The duration and content of training were not adequate to prepare the worker for effective family planning work; training was particularly lacking in preparation for work in rural areas. Also, training facilities were not being fully utilised because departmental heads did not attach much importance to

training and were unwilling to release their staff for the training period.

China and India have to train not only health workers, but also others who are assigned communications tasks. In China, the Communist Party secretaries and women's work cadres attached to birth planning committees at various levels are mainly responsible for mass propaganda and persuasion. We are not clear about how they are trained. It is possible that most of them are given technical knowledge through short orientation courses by public health officials. In India, Block Extension Educators (BEE) and Health Assistants (HA) at the PHC level do fulltime mass propaganda and persuasion work. These are trained by various regional training centres and mobile field units.

The Chinese health and family planning training always includes an ideological orientation for workers to prepare them for serving in rural areas. This kind of ideological training continues on the job through short study sessions organised by the local Party Committee.<sup>62</sup> Indian health and family planning training lacks this motivational aspect.

The Indian training programme is less decentralised than the Chinese programme. India has relied mainly on training centres and to a lesser extent on mobile units. The UN Advisory Mission recommended that a greater part of the training programme should be decentralised to the district level and continuous education should be provided through in-service training programme.<sup>63</sup>

#### IV

#### Contrasting Models of Health Manpower Development

The foregoing comparative analysis of health manpower policies in India and China brings out two contrasting models of health manpower development. One model is based on professional concern for quality of health care, concentration of health personnel in urban areas, unwillingness to recognise indigenous medical practitioners as participants in the regular health care network, and opposition to delegation of the primary curative functions to paramedical personnel. For the sake of brevity, we shall call this a "professional" model of health manpower development. An alternative model emphasises redistribution of medical manpower and physical facilities in favour of rural and poorer sections of the so-



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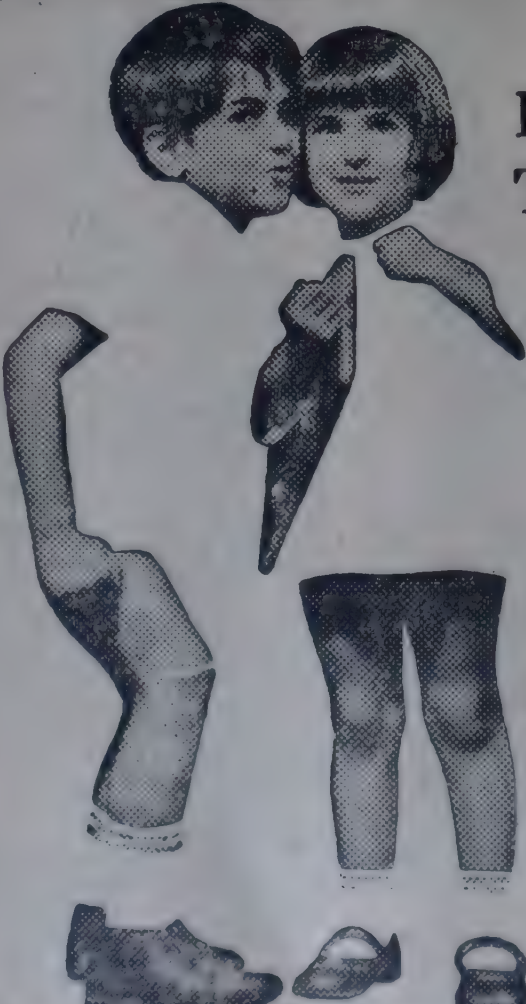
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ciety. This, in turn, requires a rapid increase in admissions to medical colleges, shortening the duration of the medical curriculum, and greater emphasis on the use of para-professionals and indigenous medical practitioners in regular health organisations. The proponents of this second model, however, argue that the twin criteria of quality and wider accessibility of health care cannot be fulfilled simultaneously at the present stage of development in poor countries such as India and China, and that accessibility must get precedence over quality for a certain transitional period of development. In contrast with the "professional" model, we shall call this a "populist" model of health manpower development.

It should be made clear that the professional and the populist models are not mutually exclusive. Every society has a different combination of elements from each of these models, depending on its needs, resources, and value orientations. The main difference between the two models is in terms of the *predominance* of either professional concern with quality of health care, or of the populist concern with serving the largest number of people. When the professional model is predominant, the principal question that policy makers ask themselves is: "which of the manpower strategies are likely to provide the best possible health care?" But when the populist model is prevalent, policy-makers are guided by a different set of questions, such as: "which of the manpower policies will enable us to reach the largest number of our clients?" and "which one will provide at least primary health care to the poorest and the remotest sections of our society?"<sup>64</sup>

The professional model dominated the health manpower policy process in China during 1949-1957 and again in 1961-1965, whereas the populist model has been most influential during the Great Leap Forward period of 1958-60 and since the Cultural Revolution (1966-68) to the present. In India the professional model was the main framework of health policy until 1966. The populist model has gained increasing theoretical acceptance from the Ministry of Health and Family Planning during late 1960s and early 1970s. However, there still remains a big gap between theory and practice, between planning and implementation.<sup>65</sup>

Development in the last year have once again raised high hopes about the implementation of a people-oriented health care system. The Srivastava

Committee recommended a complete over-haul of the present medical education system and rural health services to better serve the needs of rural areas. An action plan based on these recommendations was drawn up by the Union Ministry of Health and was accepted by the Central Council of Health in April 1976. The three most important elements of the action plan are: (1) Community health worker; (2) multi-purpose health workers trained from the existing uni-purpose field workers; (3) a referral network based on assigning Primary Health Centres to medical colleges and district hospitals. It is interesting to note that each of these elements of the new Indian health policy have been important ingredients of the Chinese health manpower strategy since the Cultural Revolution.

Will the state of emergency help to change the orientation of health services from urban-rich to rural-poor in India? Since new measures in health and family planning have been initiated only in May 1976, it is too early to answer this question. Nevertheless, it is widely believed that a political system wedded to socialist ideals and free of pressures from opposition parties and interest-groups should be able to effectively implement new policies.

The Chinese experience however shows that neither a general commitment to socialist ideals nor the centralisation of power in the hands of the leadership are sufficient conditions for building an egalitarian society. On the contrary, such a system can become highly bureaucratic and elitist. The Cultural Revolution was Mao's personal war on bureaucratic and elitist tendencies in Chinese society in general as well as within the health bureaucracy and profession in particular.

Unfortunately, we are trying in India to achieve major social changes through administrative fiat. The emergency has not only failed to change this bureaucratic model of social change, but, in fact, it has further strengthened it. Without any basic changes in either the composition or the attitudes of the existing political, bureaucratic and professional elite, the present tactics of imposing social change through administrative proclamations and orders may take us further, but not far enough.

To conclude, we would like to suggest that China has gone far ahead of India in implementing egalitarian goals of health policy. Also, the broad principles of the Chinese rural health policy are relevant to us in India. The

Indian leaders have already started re-orienting health policies on similar lines. The actual action strategies may, of course, differ according to variations in local needs and conditions. However, the task of implementing egalitarian health policies through the existing elite system may not be easy. The Chinese experience suggests that neither a general commitment to socialism nor concentration of powers in the hands of a small political-administrative elite can become an adequate mechanism for major social changes. Only a leadership determined to restructure both attitudes and power relationships within the political-administrative system will succeed. Such a restructuring must, among other things, involve de-bureaucratisation and decentralisation of power to the people.

### Notes

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- 1 See Rushikesh M Maru, "Birth Control in India and in the People's Republic of China: A Comparison of Policy Evolution, Methods of Birth Control, and Programme Organisation, 1949-1974", unpublished Ph D dissertation Department of Political Science, University of Michigan, Ann Arbor, 1976.
- 2 "India Pocket Book of Economic Information: 1971", Government of India, Ministry of Finance, Department of Economic Affairs, New Delhi, 1971, p 206.
- 3 Orleans, Leo A, "Medical Education and Manpower in Communist China", in C T Hu (ed), "Aspects of Chinese Education", New York, 1969, p 21. This is the most recent systematic survey of Chinese medical education.
- 4 "India Pocket Book of Economic Information, 1971", *op cit*, p 206. By 1975-76 there were 106 medical colleges in India. The annual admission capacity is about 13,000 and the annual outturn is estimated at over 10,000 (Report 1975-76, Government of India, Ministry of Health and Family Planning, New Delhi, 1976, p 42).
- 5 Sidel, Victor W, "Medical Personnel and their Training, in Joseph R Quinn (ed), "Medicine and Public Health in the People's Republic of China", National Institute of



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  - 10 "Stock of Allopathic Doctors in India", New Delhi, Institute of Applied Manpower Research, 1966, p 20.
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  - 12 "Chairman Mao's June 26 Directive" was first published in June 26, 1967, commemorative issue of *Huang-I Chan-pao* (Red Medical Battle Bulletin) and *Pa-i-pa Chan-pao* (August 18 Battle Bulletin), a tabloid published by the Revolutionary Committee of Grand Alliance of Peking Medical and Health Circles and "August 18" Joint Headquarters of Peking Medical College, Red Guard Congress; *SCMP*, No 198, p 30 (hereafter referred to as "June 26 Directive").
  - 13 "Monstrous Crimes of Urban 'Lords' Health Ministry in Opposing June 26 Directive", Peking, *Hung-I Chan-pao* and *Pa-i-pa Chan-pao* (June 26, 1967); *SCMP*, No 198, p 34.
  - 14 See note 12 above.
  - 15 All quotes are from Mao's "June 26 Directive", *SCMP*, No 198, p 31.
  - 16 Lampton, December 1973, *op cit*, Chapter 9, Lucas, Ann Elissa, "Legitimate Criticism of Cultural Revolution Rhetoric: An Analysis of Mao's Indictment Against the Ministry of Public Health", Unpublished paper, Harvard University, Spring 1970, p 4.
  - 17 There are many first-hand reports of medical education, but the two most prominent are by Victor W Sidel, "Medical Personnel and Training", 1973, *op cit*, pp 164-67; and E G Diamond, "Medical Education and Care in People's Republic of China", *Journal of American Medical Association*, 1971, 1552-1557. While the general aim was to reduce course work to three years, there were variations. For example, Victor Li was told at the Chung-San Medical School in June, 1973, that the three years' course was to be preceded by six to nine months of preparatory courses. (Victor Li, "1973 Field Notes", unpublished Note, Stanford University, 1973, p 8.)
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  - 19 Victor Li mentions four slogans which guide the direction of medical training: (1) "Combining Theory and Practice"; (2) "Combining Chinese and Western Medicine"; (3) "Combining Healing with Teaching"; and (4) "Operating School with Open Doors". (Victor Li, "1973 Field Notes", *op cit*, p 9.)
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  - 33 Croizier, 1973, *op cit*, pp 17-18.
  - 34 Paul Unschuld, "The Social Organisation and Ecology of Medical Practice in Taiwan", as quoted by Croizier, 1973, *op cit*, p 18.
  - 35 The 1960-61 figures are from "The Fourth Five-Year Plan: 1969-74: Draft". New Delhi, Planning Commission: 1969, p 314. The 1971 figure is from the "National Health Scheme for Rural Areas: Proposal of the Union Ministry of Health", *J Indian MA*, Volume 60, January 16, 1973, p 75. By December 1975, 5,320 PHCs and 33,291 subcentres were established (see Report, 1975-76, *op cit*, p 10).
  - 36 Fourth Five-Year Plan: 1969-74, Draft, 1969, *op cit*, p 314. The 1973-74 figures are targets, not final figures.
  - 37 "National Health Scheme for Rural Areas", 1973, *op cit*, p 75.
  - 38 See reference in note 11.
  - 39 "National Health Scheme for Rural Areas", 1973, *op cit*, pp 75-77.
  - 40 Report of the Committee on Multipurpose Workers under Health and Family Planning Programme, Ministry of Health and Family Planning, New Delhi, September 15, 1973.
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  - 42 The medical college trains doctors and assistant doctors who in turn train barefoot doctors and midwives who in turn train health workers.
  - 43 "Doctor in the Village", *Times of India*, June 8, 1975.
  - 44 *J Indian MA*, 55:10, November 16, 1970, p 362.
  - 45 Tahiliani, N D, et al, "Initial Experiences in a Mobile Hospital", *J Indian MA*, 60:2, January 16, 1973, pp 66-68.
  - 46 A J A Tauro, "The National Service Bill", *Manpower Journal* 8:1, April-June 1973, pp 60-70.
  - 47 Pi-chao Chen, "Public Health Development and Birth Planning in the People's Republic of China", unpublished monograph. Ann Arbor, Michigan, June, 1975, Chapter IV, p 7.
  - 48 See Karan Singh's statement in *The Times of India*, April 19, 1976.
  - 49 For a comparison of the extent and nature of health and family planning integration in the two countries, see Rushikesh Maru, *op cit*, Chapters 4 and 6.
  - 50 IAMR, "Stock of Allopathic Doctors in India", 1966, *op cit*, p 67.



- 51 In 1970, out of 600 students enrolled in Dr Sun Yat-Sen Medical School in Canton, approximately 250 were female (Sidel, "Medical Personnel and their Training", 1973, *op cit*, p 164) Victor Li notes that during 1973 about one-third of the students at the Chung-shan Medical School were women. (Li, "1973 Field Notes", *op cit*, p 7.)
- 52 1973 figures are from "Report of the Committee on Multipurpose Workers under Health and Family Planning", September 1973, *op cit*, p 87.
- 53 Report 1975-76, *op cit*, p 87.
- 54 See Pi-chao Chen, "The Planning of Births Programmes in the People's Republic of China", unpublished manuscript. Ann Arbor, Michigan: November 1974, p 29. Also see Chen, "China's Population Programme at the Grass-Roots Level", *Studies in Family Planning*, Volume 4, No 8, August 1973, p 224.
- 55 Kuan-tung I-hsueh-Hsien-tai I-hsueh pan (Kwangtung Medical Journal-Modern Medicine Edition), No 3, June 1966, pp 141-44; Chung-i-tsa-chih (Journal of Chinese Traditional Medicine), No 9, September 10, 1965, pp 5-7.
- 56 Examples of barefoot doctor's curriculum can be found in the contents of the "Barefoot Doctor's Handbooks", translated by Sidel ("Medical Personnel and Their Training", 1973, *op cit*, pp 167-69), and Chen (August 1973, *op cit*, p 226).
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- 58 UN, "An Evaluation of the Family Planning Programme of the Government of India", October 13, 1969, pp 47-50.
- 59 Planning Commission, "Family Planning Programme in India: An Evaluation", April 1970, pp 61-73.
- 60 Estimate Committee (1971-72), Family Planning Programme, Fifth Lok Sabha, thirteenth report. New Delhi, Lok Sabha Secretariat, April 1972, pp 165-84.
- 61 We do not have any national estimate of percentage of staff trained in family planning. However, a study conducted in 45 PHCs of Allahabad Division in Uttar Pradesh shows that 65 per cent of the PHC staff had attended family planning training. Most of these staff members were trained for one day to a month. (Misra, B D, *et al*, "Family Planning in Uttar Pradesh — Final Report of the Kanpur Project". Ann Arbor, Michigan: May 1975, unpublished manuscript, Chapter 10, p 31.)
- 62 "Preliminary Experiences in the Motivation of Training Methods for part-Time Hygiene Personnel in Rural Villages", CHEKTC (*Chinese Journal of Pediatrics*), No 5, October 1965, pp 343-46.
- 63 UN (October 1969) *op cit*, p 49.
- 64 For a detailed discussion of these models as applied to health policies in India and China, see Rushikesh M Maru, 1976, *op cit*, Chapter 6.
- 65 See "Medical Education: Sound and Fury Signifying Nothing", *Economic and Political Weekly*, January 24, 1976, pp 92-93; and "Medical Services: Window-dressing", *Economic and Political Weekly*, May 8, 1976, pp 683-85.

### List of Abbreviations

- CMJ: *Chinese Medical Journal*.  
 OB: Current Background (US Consulate General, Hong Kong).  
 CHEKTC: *Chung-hua erh-k'o tsa-chih* (*Chinese Journal of Pediatrics*).  
 FBIS: Foreign Broadcast Information Services (Far East, Washington: US Government).  
 JPRS: Joint Publications Research Service (Washington, DC, US Government).  
 J Indian MA: *Journal of Indian Medical Association* (New Delhi).  
 NCNA: New China News Agency (Peking).  
 SCMP: Survey of China Mainland Press (US Consulate General, Hong Kong).

## The buck stops here



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# Poverty and Bondage

Pradhan H Prasad

*The dominant aspect of the mode of production in Indian agriculture is semi-feudal, wherein semi-feudal bondage — defined broadly in terms of economic, and consequent social and political, dependence of the vast bulk of the poor peasantry on the landlords and the big peasantry — plays the key role.*

*The causes of rural poverty have to be sought in this institutional set-up.*

*The poor peasantry is exploited under the system of semi-feudal bondage. Moreover, because of semi-feudal bondage, the rural rich have in fact a stake in perpetuating the waste and inefficiency that is characteristic of pre-capitalist modes of production.*

ESTIMATES based on data available in the Nineteenth Round of the National Sample Survey for 1964-65 reveal that about 37 per cent of the rural population is 'employed at work' and about 60 per cent is not in the labour force. The remaining 3 per cent includes 'employed not at work', 'unemployed seeking work' and 'unemployed not seeking but available for work'. Out of those who are 'employed at work' only about 14 per cent work for less than six days a week, while about 78 per cent work on all the seven days in a week; about 64 per cent of the 'employed at work' work for more than 49 hours per week. Even so, the per capita monthly consumer expenditure of about half of those who work for more than 49 hours per week falls below the normative minimum. According to the Second Agriculture Labour Inquiry Report, about 80 per cent of the persons belonging to the agricultural labour households were found to be below the normative minimum. Thus, those who are poor in India are not necessarily those who work less or do not work at all.

The other distinctive feature of the poor in rural India is that in nine out of fifteen states,<sup>1</sup> more than 50 per cent of households from the category which were poor by any reasonable standard were found to be not reporting willingness (of any member) to take up regular full time employment within or outside the village (Table 1, Column 2). The percentage was lowest in Kerala (36.84) followed by Haryana and Punjab combined (42.8). The aforesaid facts taken together suggest that widespread bondage is prevalent in the context of labour process in rural India. But it can hardly be said to be conclusive, since we do not have direct evidence on bondage, collected on an all-India scale. However, there are other facts which can be examined in this context.

Data on income and consumption expenditure of the weaker sections of rural society provide significant corroborative evidence of our thesis. There is evidence to show that the consumption expenditure of the weaker sections of the rural population is invariably higher than

their income — sometimes as high as 14 times the income.<sup>2</sup> It is often suggested that the consumption expenditure data are always overestimates. Even if we grant this complaint about overestimation, the magnitude of overestimation cannot be so high as to rule out altogether the chronic and staggering nature of deficit thrown up by the aforesaid estimates. This forces the rural poor to take consumption loans mainly from the rural rich. The latest estimates show that there is evidence of high indebtedness among the agricultural labour households except in Assam, Kerala and Orissa (Table 1, Column 3). This invariably leads to debt-bondage.

The other method of enforcing bondage is one of leasing-out land. Though leasing-out land to such households which are economically weak, and hence incapable of maximising the output from leasing-in land, reduces the

direct gain to the land owner, it leads to indirect benefit in terms of enforcing an informal bondage on the poor peasants. It is evident from Table 2, Column 2 that the practice of households leasing-in land but cultivating less than one acre of land from amongst the households leasing-in land is widely prevalent in rural India. While it is negligible in Gujarat, Haryana and Punjab, in Kerala, Tamil Nadu and Bihar, the percentage of such households to the total number of agricultural labour households is very high. Kerala has the lowest area per agricultural holding, almost half of that in the second lowest which is West Bengal (Column 4). In Kerala we also find that the highest percentage of households have got their tenancy rights recorded (Column 3). These facts taken together suggest that there is a weakening of such bondage in Kerala because of strong poor and middle peasant move-

TABLE 1

States	Percentage of Households Not Reporting Willingness (of any member) to Take Up Regular Full-Time Employment Within or Outside Village in Net Income Category Below Rs 600 Per Annum Per Household	Percentage of Agriculture Labour Households	
		Reporting Liability to Total Households	Reporting Liability in Kind to Total Households Reporting Liability
(1)	(2)	(3)	(4)
Andhra Pradesh	49.44	37.26	6.84
Assam	53.88	17.88	12.14
Bihar	53.69	45.31	40.56
Gujarat	52.00	39.58	2.60
Haryana	42.18*	39.84	5.40
Karnataka	65.39	34.87	19.21
Kerala	36.84	19.42	5.92
Madhya Pradesh	63.12	34.79	18.63
Maharashtra	65.79	22.69	15.16
Orissa	46.67	20.50	42.44
Punjab	*	62.17	9.46
Rajasthan	48.98	49.97	10.25
Tamil Nadu	60.94	35.49	1.49
Uttar Pradesh	62.86	37.28	17.17
West Bengal	57.70	29.30	31.74

\* Haryana and Punjab samples were combined because Punjab sample for the income category was too small for any meaningful conclusion.

Source: Column 2—National Sample Survey, 25th Round, July 1970–June 1971  
Columns 3 and 4—Reserve Bank of India, All India Debt and Investment Survey, 1971-72.



ments. This is also evident from Table 3 which shows that the bulk of such holdings in Kerala, about 85 per cent, is leased-in on the basis of either fixed money payment or payment of fixed quantity of produce. The second highest is Tamil Nadu, with about 73 per cent such households leasing-in land on this basis. But in 11 states more than 50 per cent of such households lease-in for share of produce and on other unspecified terms. There are 7 states where this exceeds the 70 per cent mark. Ashok Rudra, who lamented my generalisation about the validity of a semi-feudal model (but for variations in details) for most parts of rural India, accepts that some sort of bondedness among labour force in agriculture is a widespread phenomenon. "If being bonded by various obligations to a particular employer, and thereby not being the owner of free selling labour power be a characteristic feature of feudalism, then such feudalistic features continue to exist in various forms both in farms cultivated by tenants and farms cultivated by hired labourers."<sup>3</sup>

This bondage not only makes the poverty in rural India qualitatively different from that found in advanced capitalist societies, but has far-reaching implications. Lenin has said "that capitalism substitutes free non-independence to bonded non-independence".<sup>4</sup> This however, emphasises one aspect of pre-capitalist modes of production wherein the quality of exploitation is different than that found in the capitalist mode of production. The other significant aspect of semi-feudalism has been that it has remained inefficient compared to the higher historical stages of production relations. And this has no less a bearing on poverty than the exploitative aspect. We would also argue that semi-feudal bondage is a crucial characteristic in the context of semi-feudalism because mainly on account of this there emerges a class interest which is not enthusiastic about rapid development.

The semi-feudal bondage that exists in most parts of rural India is caused mainly on account of the fact that the vast majority of the poor peasantry remains in perpetual 'deficit'. This results in a system of unequal exchanges which gives the big land-owning class, the main constituent of the rural rich, enormous economic benefits such as cheap and assured labour, better terms for leasing out land, benefits obtained through what is known as "distress sales" and acquiring the poor peasant lands for almost nothing. The enormous economic power, which in the process gets con-

TABLE 2

States	Percentage of Households		Area (ha) Per Agricultural Holding	Percentage of Home-grown Consumption to Total Consumption of Foodgrains
	Leasing-in Land but Cultivating Less than One Acre	Which Have Got Their Rights Recorded in the Context of Their Lease		
(1)	(2)	(3)	(4)	(5)
Andhra Pradesh	61.11	22.22	2.51	36.17
Assam	35.71	28.57	1.47	63.99
Bihar	89.55	17.91	1.52	47.69
Gujarat	0.00	0.00	4.11	46.86
Haryana	0.00	22.23	3.77	52.47
Karnataka	20.00	0.00	3.20	43.98
Kerala	100.00	63.16	0.69	21.41
Madhya Pradesh	58.21	22.39	3.10	63.02
Maharashtra	30.00	30.00	4.28	39.05
Orissa	78.95	36.85	1.89	54.31
Punjab	0.00	20.00	2.89	46.89
Rajasthan	15.79	52.63	5.46	60.48
Tamil Nadu	95.83	20.83	1.45	30.31
Uttar Pradesh	52.50	17.50	11.58	57.94
West Bengal	59.09	22.73	1.20	53.38

Source: Columns 2 and 3—National Sample Survey, 25th Round, Sub-round 1, July 1970-September 1970.

Column 4—Government of India, Ministry of Agriculture and Irrigation, All India Report on Agricultural Census 1970-71.

Column 5—National Sample Survey, 19th Round, July 1964-June 1965.

TABLE 3

States	Percentage of Holdings Taking Land			Correlation Coefficient Between Percentage of Net Area Sown to Cultivable Area** and Average Size of Proportional Holding	Percentage of Utilisation of Irrigation Potential Created by Major and Medium Schemes in 1974-75
	On Rent Either Partly or Wholly by Size Class Below 0.5 ha of Operational Holding Taken on Rent	Share of Produce in Size Class Below 0.5 ha	Terms Other Than Fixed Produce, and Share of Produce in Size Class Below 0.5 ha		
(1)	(2)	(3)	(4)	(5)	(6)
Andhra Pradesh	22.21	4.95	83.64	— .9510	90.6
Assam	28.33	1.89	74.62	— .7740	48.1
Bihar	49.54	64.80	5.22	— .6408	58.3
Gujarat	9.98	9.57	17.84	— .9884	60.3
Haryana	18.03	59.55	0.00	— .9483	96.2
Karnataka	17.57	23.67	11.86	— .9891	74.2
Kerala	49.62	0.48	14.54	— .2964*	100.0
Madhya Pradesh	18.48	5.54	70.97	— .9626	71.8
Maharashtra	13.61	NA	NA	— .9903	69.0
Orissa	18.35	34.75	17.28	— .9025	95.7
Punjab	23.69	60.45	21.18	— .9794	85.9
Rajasthan	16.65	7.36	79.67	— .5020*	87.7
Tamil Nadu	37.12	23.58	3.43	— .6557	96.3
Uttar Pradesh	46.75	NA	NA	— .9560	83.0
West Bengal	22.95	17.69	72.95	— .2795*	96.8

\* Not significant.

\*\* Cultivable area is defined as area of a holding excluding area under permanent pastures, other grazing lands, land under miscellaneous tree crops, barren and uncultivable land, forests and area under non-agricultural use.

Source: Columns 2, 3, 4 and 5—Government of India, Ministry of Agriculture and Irrigation, All India Report on Agricultural Census, 1970-71.

Column 6—Government of India, Planning Commission, Annual Plan 1975-76

centrated in the hands of the rural rich, not only allows them to dominate over the economic activities of the area but also makes them politically very powerful. They claim the bulk of bene-

fits that flow in the area either in the name of 'development activities' or 'welfare of the rural poor'. They are responsible for the distribution of relief and essentials like sugar and kerosene



TABLE 4

States	Poor Peasant Households with Land			Poor Peasant Households without Land		
	Percentage Worked in Agriculture to Total Mandays Worked	Percentage Worked on Own Farm to Total Mandays Worked in Agriculture	Per Capita Monthly Expenditure on Consumption (Rs)	Percentage Worked on Own Farm to Total Mandays Worked in Agriculture	Percentage Worked on Own Farm to Total Mandays Worked in Agriculture	Per Capita Monthly Expenditure on Consumption (Rs)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhra Pradesh	82.85	23.98	28.03	78.16	3.46	29.51
Assam	84.02	59.23	34.61	73.93	7.36	36.89
Bihar	88.04	11.74	22.67	86.91	1.81	29.05
Gujarat	91.04	55.89	30.10	78.21	12.16	29.82
Haryana	88.86	80.79	41.25	60.33	11.40	32.98
Karnataka	90.41	30.96	29.23	84.78	0.29	25.61
Kerala	58.72	4.94	25.43	60.12	1.97	30.25
Madhya Pradesh	86.21	24.53	24.16	85.85	1.39	25.01
Maharashtra	91.40	21.33	28.44	89.76	3.66	27.46
Orissa	76.46	22.60	24.70	70.27	1.03	23.53
Punjab	94.34	82.83	47.28	75.26	2.46	36.89
Rajasthan	76.77	68.77	27.06	62.36	9.90	31.98
Tamil Nadu	87.09	31.89	27.89	75.97	2.78	24.67
Uttar Pradesh	85.12	46.18	26.94	68.82	4.53	27.31
West Bengal*	83.28	14.20	25.78	79.08	0.03	24.95

\* Refers to Sub-round 1, July 1970-September 1970.

Source : National Sample Survey, 25th Round, July 1970-June 1971.

TABLE 5

Size Class of Households (operational holdings in acres)	Plough Per Acre of Operational Holding			
	1954-55		1971-72	
	Wooden (2)	Iron (3)	Wooden (4)	Iron (5)
0.01- 0.49	0.733	0.025	0.619	0.074
0.50- 0.99	0.579	0.010	0.662	0.042
1.00- 1.49	0.538	0.012	0.556	0.044
1.50- 2.49	0.403	0.008	0.450	0.033
2.50- 4.99	0.266	0.007	0.293	0.036
5.00- 7.49	0.177	0.005	0.205	0.023
7.50- 9.99	0.140	0.005	0.154	0.027
10.00- 14.99	0.108	0.005	0.127	0.021
15.00- 19.99	0.078	0.005	0.093	0.016
20.00- 24.99	0.066	0.004	0.079	0.014
25.00- 29.99	0.056	0.005	0.067	0.015
30.00- 49.99	0.047	0.005	0.053	0.009
50.00 and above	0.027	0.003	0.040	0.006

Source : National Sample Survey, 8th Round and 26th Round.

oil. Most of the quarrels among the poor peasants are settled according to their whims. For all practical purposes they are the 'Law' in their area.<sup>5</sup> But they are bound to lose most of these privileges if there is rapid overall development in the area. So the dominant class interest remains inimical to rapid growth.

The 25th Round National Sample Survey, July 1970-June 1971 divides the weaker section of the rural population of India into two categories; (1) the lowest 10 per cent of cultivating households, and (2) non-cultivating labour households. We prefer to term them as (1) poor peasant households with land and (2) poor peasant households

without land (Table 4). In view of widespread bondage prevailing in the countryside, they cannot be termed as labour households in the true sense of the term. Moreover, those who have been termed by us as 'poor peasant households with land' instead of 'lowest 10 per cent of cultivating households' invariably spend the bulk of their time in agriculture; and only in five states, i.e., Assam, Gujarat, Haryana, Punjab and Rajasthan, the percentage of mandays worked on own farm to the total worked in agriculture exceeded 50 per cent mark (Table 4, Columns 2 and 3). Moreover, those who neither earn their major income nor spend the bulk of their time working for others,

would be classed under the category, poor peasantry, even if they devote some time working for others in agriculture.

In the course of studies conducted in Bihar,<sup>6</sup> it was found that in operational terms, the loans advanced to the poor peasants were invariably like doles. It is known to both parties that it is beyond the means of the 'deficit' households to repay either the loan or the interest in full, even in the long run. Still the loans are advanced. The whole operation, in fact, means that the poor peasant receives only 'subsistence'. Part of it is paid in cash or kind or both. The rest is paid as a loan so as to enforce a debt-bondage on the poor-peasantry with a view to appropriate almost the entire surplus value (which the poor peasantry might be receiving because of some assets held by them). This explains the absence of flow-equilibrium (in the operation of the credit mechanism) which is a characteristic feature of capitalism. That is why in a semi-feudal set-up, loans repaid invariably remain less than loans taken and loans outstanding exceed the total value of assets of the debtors.

These same features prevail in other states also.<sup>7</sup> This also shows that even owning land does not improve the consumption level of the poor peasantry (Table 4, Columns 4 and 7). Only in Haryana and Punjab does the poor peasantry seem to enjoy a distinct advantage by owning land. In both these states the per capita consumption expenditure of those with land is more than 25 per cent higher than those without land. Bihar presents the other extreme. In this case the consumption expenditure of those without land is about 28 per cent higher than those with land. This may also be due to the fact that it is not possible for the poor peasantry, saddled with debt and semi-feudal exploitation, to get even that much from self-cultivation which they would have got from working for others.

Still the advantages of a 'status' enjoyed by those who own land over those without land in a semi-feudal set-up prevents such economically weak sections from parting with land. Then, this category with land may have significant number of poor-middle peasantry who find it below their dignity to work for others. Some of these causes have been operative in Kerala which shows signs of weakening of the semi-feudal stranglehold. In Haryana and Punjab which otherwise show signs of weakening of semi-feudal institutions, we find fairly high indebtedness (Table 1, Column 3). But here also only a very



TABLE 6

Annual Rate of Growth of Agricultural Output (Percentages)	Standard Deviation of Fluctuations in Production Estimated from the Three Years Moving Average	Low	Moderate	High
		<7.5	≥7.5 to <15	≥15
≥ 5	Haryana			
≥ 3 to <5	Punjab			
≥ 2 to <3	Kerala	Orissa	Gujarat	
< 2	West Bengal	Uttar Pradesh	Bihar	
	Assam			
	Tamil Nadu	Karnataka	Rajasthan	
	Andhra Pradesh	Madhya Pradesh	Maharashtra	

Source: Jose, A V, "Agricultural Projection Trends in India 1956-57 to 1972-73", (mimeographed).

small proportion of households show liability in kind (Table 1, Column 4). Moreover, in the case of Punjab though the high indebtedness reflects bondage, it is not of the traditional type; it reflects advance payments which are done to attach the labourers for maintaining assured supply of labour in peak seasons.<sup>8</sup> It should however be noted that in transitional societies all the correlates related to any particular mode may not be present with the same intensity, specially when the analysis is based on data which was neither designed nor collected to study the mode of production. Some of them in some states may give somewhat opposite results. Therefore, the conclusions have to be drawn after taking the things in their totality rather than getting bogged down in narrow empiricism. For example, the percentage of homegrown consumption to total consumption of food-grains is lowest in Kerala, but it is higher in Haryana and Punjab than in other states where persistence of semi-feudal production relations is indicated (Table 2, Column 5).

One of the factors which operates as a drag on technological improvement in a semi-feudal set-up is the system of ownership of produced means of production (for conduct of husbandry) by poor peasants who receive only bare 'subsistence'. They find that they can neither invest in nor adopt new technology in agriculture. The decreasing number of ploughs per acre of operational holdings as the size of operational holdings increase (Table 5), suggests that produced means of production is mainly held by those who receive the bare 'subsistence' rather than those who receive the 'surplus' in rural India. There seems to have been hardly any change in its extent between the early fifties and the early seventies.

Tractorisation of agriculture in rural India as a whole is hardly of an order to explain away such decreasing trends in the number of ploughs per acre of operational holding with increase in its size.

There are other evidences of wastage. There is a negative correlation between percentage of net area sown to total cultivable area and average size of operational holding in twelve out of fifteen states (Table 3, Column 5). The exceptions are Kerala, Rajasthan and West Bengal. Percentage of utilisation of irrigation potential created by major and medium schemes in 1974-75 is more than 90 only in six states — Andhra Pradesh, Haryana, Kerala, Orissa, Tamil Nadu and West Bengal (Table 3, Column 6). It is 100 per cent in Kerala, and lowest in Assam followed by Bihar.

It will thus be seen that from the point of view of agricultural development, in a very general sense Haryana and Punjab can be said to be a class by themselves; they are followed by Kerala and West Bengal (Table 6). The only difference between the Haryana-Punjab and Kerala-West Bengal set is that the former is somewhat vaguely near to the Junker model while that the latter to some extent conforms to the Kulak dominated model, with an organised peasantry. There are some evidences of the weakening of semi-feudalistic features in West Bengal also where indebtedness is low (Table 1, Column 3) and where there is less of wastage (Table 3, Columns 5 and 6). However, semi-feudalistic features are less weak in West Bengal than in Kerala.<sup>9</sup> But all these still support the thesis that the dominant aspect of mode of production in Indian agriculture, by and large, is semi-feudal, wherein the semi-feudal bondage — defined broadly in terms of

economic, and consequent social and political dependence of the vast bulk of poor peasantry on the landlords and the big peasantry — plays the key role in keeping the system inimical to overall development.

Under these circumstances it is futile to discuss the agenda related to poverty unless the objective conditions of the prevailing semi-feudal aspect of mode of production are understood and analysed and the related implications of waste and inefficiency are brought sharply into focus. Unless these contradictions in the context of our overall development are understood properly and analysed scientifically, their resolution and, therefore the eradication of poverty, will remain unattainable and impossible.

### Notes

- 1 These 15 states account for more than 95 per cent of India's population.
- 2 Prasad, Pradhan H, "Reactionary Role of Usurer's Capital in Rural India", *Economic and Political Weekly*, Special Number, August 1974, Table 1.
- 3 Rudra, Ashok, "Semi-Feudalism Usury Capital, Etcetera", *Economic and Political Weekly*, November 30, 1974, p 1997.
- 4 Lenin, V I, "Collected Works", FLPH, Moscow 1960, p 203.
- 5 Das, Arvind Narayan, "Agricultural Labour: In Bonded Freedom", *Economic and Political Weekly* May 15, 1976.
- 6 Prasad, Pradhan H, "Production Relations: Achilles' Heel of Indian Planning", *Economic and Political Weekly*, May 12, 1973; "Agrarian Unrest and Economic Change in Rural Bihar: Three Case Studies", *Economic and Political Weekly*, June 14, 1975; and "Sarvodaya and Development: Multi-disciplinary Perspective from Musahari", *Journal of Social and Economic Studies*, Vol IV, No 1, March 1976. See also Jannuzi, F T, (1974), "Agrarian Crisis in India: The Case of Bihar", and also review of the book by Prasad, Pradhan H in *Journal of Asian Studies*, May 1976, pp 345-7.
- 7 Prasad, Pradhan H, "Reactionary Role of Usurer's Capital in Rural India", *op cit*, Table 3.
- 8 Bhalla, Sheila, "New Relations of Production in Haryana Agriculture", *Economic and Political Weekly*, March 27, 1976.
- 9 Bhaduri, A, "A Study of Agricultural Backwardness under Semi-Feudalism", *Economic Journal*, March 1973; Newaj, Khoda and Rudra, Ashok, "Agrarian Transformation in a District of West Bengal", *Economic and Political Weekly*, March 29, 1975; Rudra, Ashok, "Loans as a Part of Agrarian Relations: Some Results of a Preliminary Survey in West Bengal", *Economic and Political Weekly*, July 12, 1975.



# Famines as Failures of Exchange Entitlements

Amartya Sen

The primary object of this note is to propose viewing a class of famines as arising from 'failures of exchange entitlements', and to contrast this approach with the more traditional view of 'food availability decline'.

A second aim is to examine critically the ideas on famines outlined by Thomas Robert Malthus in his "An Investigation of the Cause of the Present High Price of Provisions" (1800), which provided one of the most clear accounts of the 'food availability' approach in an exchange economy — an account that can stand even without presupposing his theory of population. An evaluation of Malthus' analysis of famines helps to identify some of the inherent weaknesses of the food availability approach in the context of an exchange economy.

Finally, the 'exchange entitlements' approach is illustrated with some facts relating to the Bengal Famine of 1943.

## I

THE approach of 'food availability decline', which I will call FAD (without apologising), attributes the causation of famines to a sharp decline in the availability of food supply in the region in question. This is the common element of the approach, through the *manifestations* of famines can be explained in one of several distinct ways. Also, the *causation* of the sudden decline of food supply can also be explained in many different ways. Frequently enough, FAD goes with a Malthusian theory of population. To quote an influential recent book by Brown and Eckholm:

"Since agriculture began, food production has increased several hundredfold. Unfortunately, man's numbers have also expanded to absorb the additional food, always pressing against the limits of supply. Under these circumstances, a sudden sharp reduction in the food supply in any particular geographical locale has usually resulted in widespread hunger and famine." (L R Brown and E P Eckholm, "By Bread Alone", Pergamon Press, Oxford, 1975, p 25.)

But FAD can also be "non-Malthusian" as far as the *causation* of the food shortage is concerned. (Indeed Brown and Eckholm themselves also note that while "world population growth continues to be rapid, ... rising affluence now has emerged as another major claimant on the world's food-producing resources", p 6.) The essential aspect of FAD is the view that famines are caused by a sudden decline in food availability, and no matter what the immediate causes of this decline are, or what its predisposing conditions happen to be, FAD stands as long as the famine is accepted to be the result of that decline.

In some ways, FAD is the most obvious approach to famines. In explaining, say, the Irish famine of the

1840s, one has rather compelling reasons to concentrate on the decline in the food availability arising from the potato blight. There are other factors too, clearly enough, but they seem subsidiary to the central fact of unavailability of potatoes. The 'anne-wari' systems used in the 'famine codes' in India almost certainly derived their rationale from some variant of FAD, and it was natural that this view should traditionally be taken.

FAD works best when much of the food eaten by a family happens to be grown by it without the need of exchange. In an exchange economy, however, one has to look at the terms of exchange, and while food availability clearly will be an important influence on these terms, there are also other factors involved. In an exchange economy, a family's ability to buy food depends on the rates at which its labour and other possessions can be exchanged — multilaterally or bilaterally — with other commodities especially food. If something leads to a sharp decline in the food that these possessions can command in exchange, the family will have to starve. This elementary recognition opens up another dimension in the causation of famines.

It is, of course, a common place to say that famines depend "not merely on production, but also on distribution". This piece of wisdom throws remarkably little light on the problem. For an economy based on the consumption of self-produced food, production and distribution of food cannot really be separated. For an exchange economy, they can be, but the aphorism is not particularly helpful there either, until something is said on the way the distribution of food is brought about. Obviously, our ultimate concern must be with the amounts of food which the respective families

consume, and this can be expressed through a total availability figure combined with the relative shares of that total going to the set of families, respectively. While this style of expression may give us the satisfying feeling that we have taken a step forward in the analysis of famines, this illusion will not survive a close scrutiny.

The crucial fact is that in an exchange economy the 'distribution' of a particular commodity is the result of exchange, and whether a family has something to eat depends on what it can sell and the prices that are fetched by what it can sell in comparison with the prices of food. An economy in a state of comparative tranquillity may develop a famine if there is a sudden shake up of the system of rewards for exchange of labour, commodities and other possessions. A sharp revision of 'exchange entitlements' can precipitate a famine even when there is no over-all shortage of food. It is this type of causation that the approach of the 'failure of exchange entitlements' (FEE for short) is aimed at capturing.

Perhaps a disclaimer is needed here. The expression 'entitlement' can be given a normative sense, e.g., in Robert Nozick's interesting account of 'rights' (see his "Anarchy, State and Utopia", Blackwell, 1974). No such meaning is intended here. Any system of exchange is a system of entitlements, e.g., person  $i$  can sell his labour for wage  $w$  with which he can buy  $q$  amount of food. People's ability to survive in an exchange economy depends on the system of exchange entitlements, and if the entitlements change in a way as to exclude a lot of people from the ability to acquire food, a famine results. This does not go into the issue as to whether the earlier system of entitlements was itself 'just' or not —



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indeed several normative theories of justice may find it quite unjust — but the issue under discussion is the more factual one of relating inability to survive *shifts* in the pattern of exchange entitlements. In this connection, it may be worth remarking that Marx's theory of 'exploitation' — like Nozick's theory of 'entitlements' — also goes into the acceptability of certain rights, and my current concern is not with that issue.

Another disclaimer is concerned with the relations between prices and exchange entitlements. Though prices typically form an important part of a system of exchange entitlements, there is a difference. Exchange entitlements are concerned with what a person can, in fact, get through exchange and not with what he *could* get if he *could* buy and sell at given prices. The presence of unemployment drives a wedge between the wage rate and the entitlement from exchanging labour. The presence of monopoly and other restrictions also makes prices depart from exchange entitlements. Exchange entitlements represent a comprehensive picture of exchange possibilities faced by groups of people, and reflects, among other things, the institutional structure of the economy. It is, of course, possible to speak of a particular person's *anticipations* of exchange entitlements on which his own plans are based whether or not these anticipations reflect the *real* possibilities faced by him, though it is natural to expect correction of anticipations in the light of experience.

It can be argued that FEE-type famines have a special relevance for developing countries at early stages of modernisation and growth. In a primitive economy based on family labour or communal labour *prior* to the development of the wage system, famines resulting from failures in exchanging labour cannot arise. In so far as exchange of commodities is also limited and people eat what they themselves grow, the role of other failures of exchange entitlements is also remote. Famines based on FAD can, of course, take place, but the relevance of FEE-type famines grows only as the economy becomes more exchange-orientated and in particular as labour emerges as another 'commodity' to be bought and sold in the market.

Failures of exchange entitlements are also less likely in socialist economies, or in advanced capitalist econo-

mies, since a system of employment guarantee in the former and entitlements to 'unemployment benefits' in the latter, tend to rule out large-scale starvation resulting from inability to exchange one's ware. It is perhaps worth remarking in this context that the absence of famines in the economically advanced countries is almost certainly due to the altered system of exchange entitlements through 'social security' rather than due to the average level of national prosperity as such.

In contrast an exchange economy based on wage labour, without a system of unemployment benefits and related measures of social security, is particularly susceptible to famines of the FEE-type. A recent example was the 1974 famine in Bangladesh. The flood that destroyed the crop did reduce the availability of food, but the sharp decline in employment and the failure of exchange entitlement of labour was immediate, and the famine was made severe by that. (Research carried out at the Bangladesh Institute of Development Studies seems to provide ample evidence of the impact of wage earning failure.) Similar failures in exchanging labour have been observed in recent Indian famines. (See, for example, Amrita Rangaswami, "A Generation Being Wiped Out: Report on West Bengal Famine", *Economic and Political Weekly*, IX, No 48, November 30, 1974; V Subramanian, "Parched Earth: The Maharashtra Drought", Orient Longmans, 1975; V V Borkar and M V Nadkarni, "Impact of Drought on Rural Life", Popular Prakashan, 1975; K Suresh Singh, "The Indian Famine 1967: A Study in Crisis and Change", People's Publishing House, Bombay, 1975; N S Jodha, "Famine and Famine Policy: Some Empirical Evidence", *Economic and Political Weekly*, X, No 40, October 11, 1975. While the light that these studies throw on exchange entitlements is incidental to their respective main themes, quite a bit of information does, in fact, emerge on variations of exchange entitlements in the process of famines.)

There are reasons to think that the 'exchange entitlements' approach is particularly important *after* wage labour emerges in the process of development and *before* social security measures become common. Expansion of commodity exchanges in general also contributes to this. The 'food availability' approach — no matter how relevant for medieval famines — is not

robust enough to permit a serious analysis of modern famines.

## II

There is little doubt that Malthus' analysis of food shortage in 1800 was a supplement to his theory of population presented two years earlier.

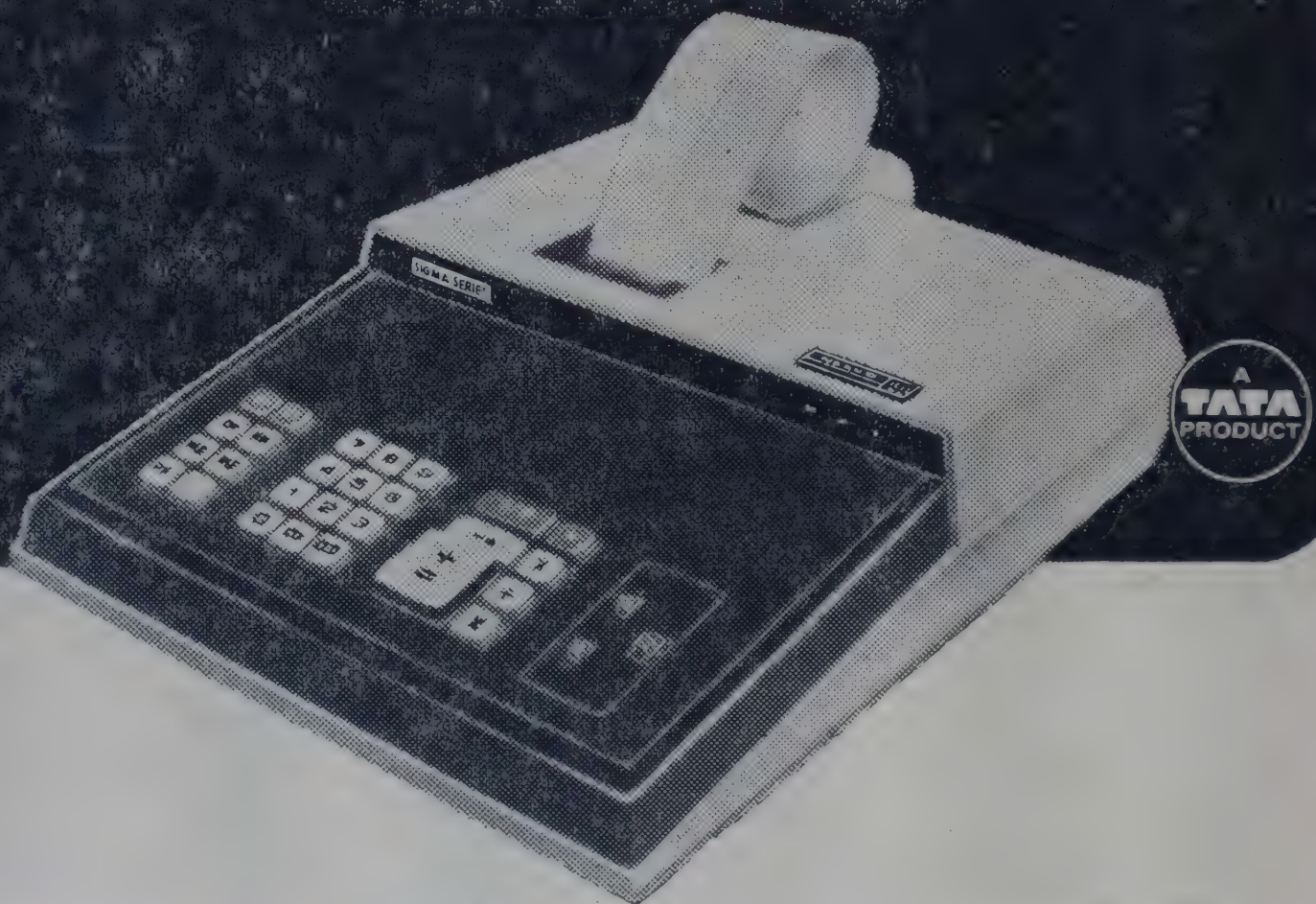
"To what then can we attribute the present inability in the country to support its inhabitants, but to the increase of population? I own that I cannot but consider the late severe pressures of distress on every deficiency in our crops, as a very strong exemplification of a principle which I endeavoured to explain in an essay published about two years ago, entitled, "An Essay on the Principle of Population, as It Affects the Future Improvement of Society." It was considered by many who read it merely as a specious argument, inapplicable to the present state of society; because it contradicted some preconceived opinions on these subjects. Two years' reflection have, however, served strongly to convince me of the truth of the principle there advanced, and of its being the real cause of the continued depression and poverty of the lower classes of society, of the total inadequacy of all the present establishments in their favour to relieve them, and of the periodical returns of such seasons of distress as we have of late experienced." [Malthus (1880, p 25).]

But over and above claiming confirmation for his theory of food shortage arising from population expansion, Malthus also presented a theory linking the food shortage to the behaviour of prices and distribution, and that theory was not essentially dependent on the *genesis* of the food shortage. Malthus' analysis of adjustments of food prices had two notable features. First, prices had to rise to eliminate a sufficient number of demanders from the market to make the current supply last. The price rise was not caused by speculative activities but simply by the role of prices to adjust demand to supply.

"It seems now to be universally agreed, that the stock of old corn remaining on hand at the beginning of the harvest this year was unusually small, notwithstanding that the harvest came on nearly a month sooner than could have been expected in the beginning of June. This is a clear, decided, and unanswerable proof that there had been no speculations in corn that were prejudicial to the country. All that the large farmers and cornfactors had done, was to raise the corn to that price which excluded a sufficient number from their usual consumption, to enable the supply to last throughout the year." [Malthus (1880, p 16).] The second feature was the role at-



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tributed to the operation of the system of parish allowances in making it difficult to eliminate the demand for food by the poor, thereby leading to a much larger increase in prices.

"This price, however, has been most essentially and powerfully affected by the ability that has been given to the labouring poor, by means of parish allowances, of continuing to purchase wheat notwithstanding its extraordinary rise." [Malthus (1880, p 16).]

Malthus did not, of course, condemn the parish allowances for this reason, but regarded it as absurd that the poor should complain of the price rise.

"I do not, however, by any means, intend to infer, from what I have said, that the parish allowances have been prejudicial to the state; or that, as far as the system has been hitherto pursued, or is likely to be pursued, in this country, that it is not one of the best modes of relief that the circumstances of the case will admit. The system of the poor laws, in general, I certainly do most heartily condemn, as I have expressed in another place, but I am inclined to think that their operation in the present scarcity has been advantageous to the country. The principle benefit which they have produced, is exactly that which is most bitterly complained of — the high price of all the necessaries of life. The poor cry out loudly at this price; but, in so doing, they are very little aware of what they are about; for it has undoubtedly been owing to this price that a much greater number of them has not been starved." [Malthus (1800, pp 18-9).]

Indeed, in the system of parish allowances Malthus saw a mechanism that would magnify the price rise due to the food shortage in an almost unending price explosion.

"The poor complained to the justices that their wages would not enable them to supply their families in the single article of bread. The justices very humanely, and I am far from saying improperly, listened to their complaints, inquired what was the smallest sum on which they could support their families, at the then price of wheat, and gave an order of relief on the parish accordingly. The poor were now enabled, for a short time, to purchase nearly their usual quantity of flour; but the stock in the country was not sufficient, even with the prospect of importation, to allow of the usual distribution to all its members. The crop was consuming too fast. Every market day the demand exceeded the supply; and those whose business it was to judge on these subjects, felt convinced, that in a month or two the scarcity would be greater than it was at that time. Those who were able, therefore, kept back their corn. .... The corn, therefore, naturally rose. The poor were

again distressed. Fresh complaints were made to the justices, and a further relief granted; but, like the water from the mouth of Tantalus, the corn still slipped from the grasp of the poor; and rose again so as to disable them from purchasing a sufficiency to keep their families in health. The alarm now became still greater, and more general. .... With further relief and additional command of money in the lower classes, and the consequent increased consumption the number of purchasers at the then price would naturally exceed the supply. The corn would in consequence continue rising." [Malthus (1880, pp 11-13).]

Malthus was most critical of the proposal to insulate the poor against price rises by making the wages paid to the poor to be proportional to food prices. He saw in this the possibility of dragging the middle classes down to starvation also.

"It has often been proposed, and more than once I believe, in the House of Commons, to proportion the price of labour exactly to the price of provisions. This, though it would be always a bad plan, might pass tolerably in years of moderate plenty, or in a country that was in the habit of a considerable exportation of grain. But let us see what would be its operation in a real scarcity. We suppose, for the sake of the argument, that by law every kind of labour is to be paid accurately in proportion to the price of corn, and that the rich are to be assessed to the utmost to support those in the same manner who are thrown out of employment, and fall upon the parish. We allow the scarcity to be an irremediable deficiency of one-fourth of all the provisions of the country. .... The middle classes of society would very soon be blended with the poor; and the largest fortunes could not long stand against the accumulated pressure of the extraordinary price of provisions, on the one hand, and the still more extraordinary assessments for allowances to those who had no other means of support, on the other. The cornfactors and farmers would undoubtedly be the last that suffered, but, at the expiration of the three quarters of a year, what they received with one hand, they must give away with the other; and a most complete levelling of all property would take place. All would have the same quantity of money. All the provisions of the country would be consumed; and all the people would starve together." [Malthus (1880, pp 17-8).]

While Malthus reassured his readers — presumably belonging to the aforementioned classes — that "there is no kind of fear, that any such tragic event should ever happen in any country" (p 18), he also felt that some sections of the community must suffer

in the situation of shortage presupposed by him.

"To suppose that a year of scarcity can pass without distressing severely a large part of the inhabitants of a country, is to suppose a contradiction in the nature of things." [Malthus (1880, p 21).]

Finally, it should be noted that Malthus saw the speculators and traders as beneficial forces rather than as agents aggravating the price rise by manipulation of the market.

"These commodities, therefore, rose as naturally and as necessarily as the corn; and, according to the genuine principles of fair trade, their price was fixed at that sum which only such a number could afford to give, as would enable the supply to answer the demand .... To fix upon this sum is the great object of every dealer and speculator in every commodity whatever, and about which he must, of course, exercise his private judgment .... Most happily for society, individual interest is, in these cases, so closely and intimately interwoven with the public interest, that one cannot gain or lose without a gain or loss to the other. The man who refuses to send his corn to market when it is at twenty pounds a load, because he thinks that in two months time it will be at thirty, if he be right in his judgment, and succeed in his speculation, is a positive and decided benefactor to the state; because he keeps his supply to that period when the state is much more in want of it; and if he and some others did not keep it back in that manner, instead of its being thirty in two months, it would be forty or fifty." [Malthus (1880, p 14).]

Malthus' theory, then, is one of a genuine food shortage leading to price rise to eliminate a part of the demand by pricing some consumers out of the market to bring total demand in line with supply. Speculators simply give shape to these "genuine principles of fair trade" without aggravating the price rise, but attempts to resist the starvation of the poor by raising allowances and wages do increase the prices more than they would have otherwise.

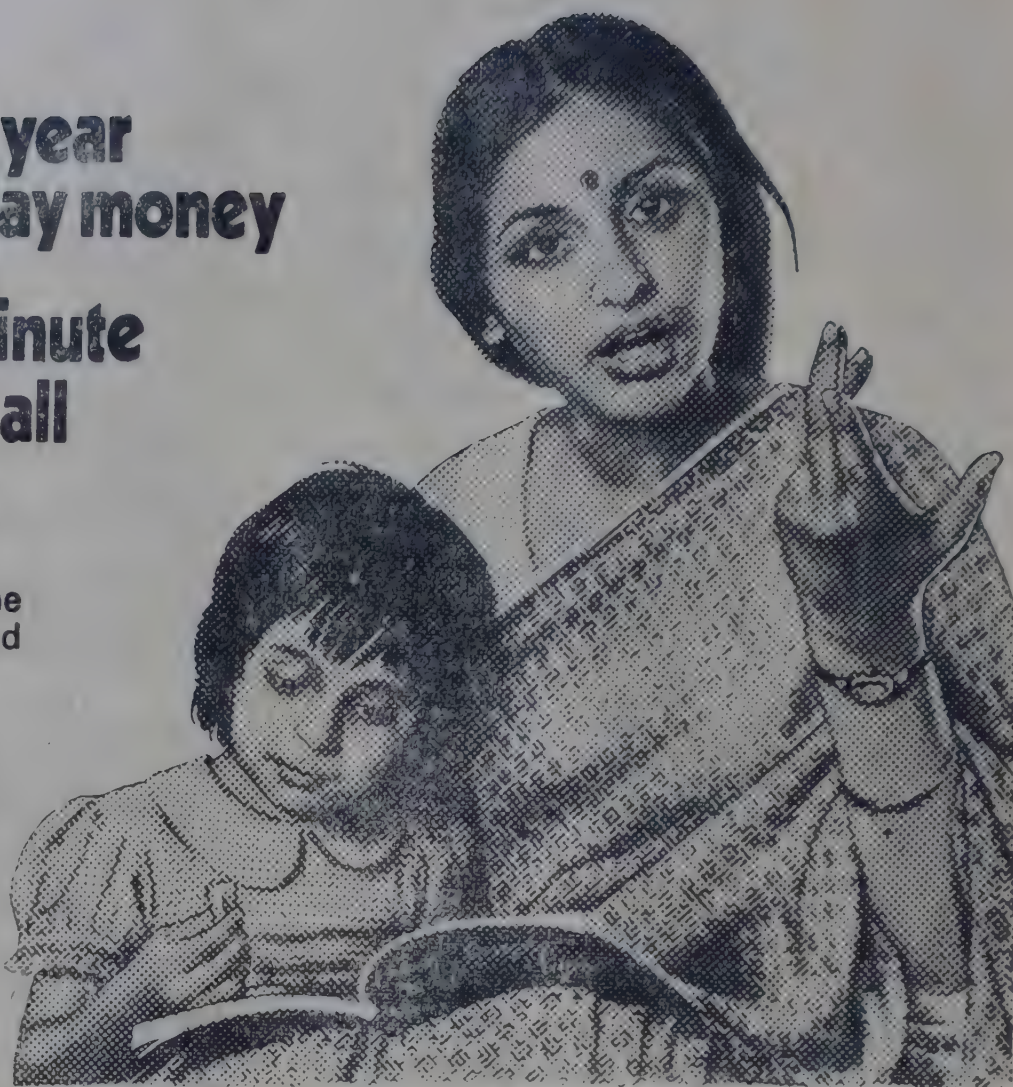
The most important deficiency in Malthus' model is the lack of people producing or selling goods whose fortunes are presumably affected by changes in prices. Malthus talks of the poor living on parish allowances and wages paid under the Poor Laws, and on charity. He talks of the rich who have to foot these bills. There is no question of starvation being generated by the fall in the exchange price of some commodity which provides the livelihood of a section of the community. The exchange rates between food



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TABLE: INDICES OF RICE PRICE AND OF EXCHANGE RATES OF INDICATOR COMMODITIES VIS-A-VIS RICE IN BOLPUR PRE-FAMINE AND FAMINE PERIODS

Mid-month	Rice (No. 2) (absolute price)	Rural Unskilled Wage	Cloth	Ramboo Umbrellas	Fish (Pona)	Milk	Haircut
Dec 1941	100	100	100	100	100	100	100
Sept 1942	114	88	197	145	132	88	88
Oct 1942	179	56	126	69	84	56	56
Nov 1942	221	38	102	92	68	45	45
Dec 1942	179	66	134	85	84	66	56
Jan 1943	193	70	132	85	65	61	52
Feb 1943	179	75	142	98	70	66	56
Mar 1943	271	44	94	69	46	44	37
Apr 1943	371	36	68	60	34	32	27
May 1943	557	24	46	43	27	21	18
Jun 1943	514	26	49	48	39	23	19
July 1943	521	27	49	47	38	23	19
Aug 1943	536	31	47	44	37	22	19
Sept 1943	357	38	76	66	56	33	28
Oct 1943	400	38	68	57	50	30	25
Nov 1943	314	48	86	73	80	47	32
Dec 1943	236	79	118	90	106	62	42
Jan 1944	257	65	111	91	97	57	58

Sources: The basic sources are (i) "Consumer Price Index and Wages for Agricultural Labour in the Western Region of West Bengal", Agro-Economic Research Centre for East India, Visva-Bharati, 1960; (ii) the log books of Sriniketan Dairy; (iii) direct records on Bolpur retail prices available at the Agro-Economic Research Centre for East India, on which (i) is based, and using which some corrections of the figures in (i) were made by me. Since cloth quotations are unavailable for the period, except for gamcha (small towels), the gamcha prices are used as indicators of cloth prices. I am grateful to Madan Gopal Ghosh for much guidance on the data base.

and other goods and services do not come in at all — except in a brief reference to the prices of "butter, cheese, bacon, pickled pork, rice, potatoes, etc" rising as the poor "make use of their additional command of money" through increased allowances to purchase these goods (pp 13-14). A crisis of 'exchange entitlements' leading to starvation cannot have much of a role in the model specified by Malthus, and it is not surprising that the only cause of starvation that is investigated is the genuine shortage of food grains. Speculators are given no role except to dampen price variations since they buy cheap and sell dear in a competitive way, and if a speculator "be wrong in his speculation, he loses perhaps very considerably himself" (p 15).

While Malthus' analysis was geared to the situation in Britain in 1799 and 1800, as he saw it, it is clear that he felt he was putting forward a theory of some generality. And, indeed, his views of food shortages and also of speculation have survived, and one meets similar analyses in many recent writings. The fact that these views emanate from

an extremely simple model, leaving out most of the essential features of an exchange economy, is worth noting. The presence of many commodities and the possibility of wages responding to market forces open up other routes to starvation and famines. Even Malthus' neat analysis of the benign nature of speculation, in which he anticipated a well known modern theory associated with the names of Milton Friedman and others, does not really survive in a more complex model. (On this see the recent contribution of Oliver Hart, "On the Profitability of Speculation", Discussion Paper No 64, University of Essex, 1975; note however that Hart traces the argument "that speculation is stabilising" to John Stuart Mill, but not to the earlier writing of Malthus.) Malthus' analysis stood perfectly well within his model but the dependence of that analysis on the extremely limited nature of the model reduces the relevance of his conclusions. Malthus provided an early theory of the FAD view of starvation and famines, and with the recent explosion of interest in "food crises", this theory has been making frequent re-appearances in policy discussions.

### III

The Bengal Famine of 1943 — the greatest famine of the century — can be viewed both in terms of 'food availability decline' (FAD) as well as that of 'failures of exchange entitlements' (FEE). In a forthcoming paper I have tried to present the contrast between the two approaches as applied to the Bengal Famine, and have argued that the FAD approach works very badly in this case, while the FEE approach works much better ("Famines, Food Shortage and Exchange Entitlements: The Case of the Great Bengal Famine", forthcoming in the *Cambridge Journal of Economics*, Vol 1). While I shall not try to repeat the arguments here, I would mention that it emerges that the food availability per capita in Bengal in 1943 was not substantially different from availabilities in previous years even after note has been taken of: (i) the disappointing aman crop of December 1942, (ii) the loss of import of rice from Burma, (iii) net transactions with the rest of India both in rice and in wheat, (iv) grains purchased by the military, (v) loss of food due to the 'denial' policies imposed by the military, (vi) population growth, and (vii) the 'carry-over' effects of previous bad crops.

The FAD view received the qualified blessing of the official Famine Inquiry Commission of 1944 (see "Report on Bengal", p 77), and this endorsement has been widely echoed in distinguished scholarly works (e.g. see B M Bhatia, "Famines in India 1860-1965", Asia, 1966, pp 321-4; G Blyn, "Agricultural Trends in India 1891-1967", University of Pennsylvania Press, p 98). More recently, the FAD interpretation of the Bengal Famine has been frequently cited in the outbursts of alarm about the "world food crisis" [e.g. in the Brown and Eckholm (1975, p 27), and even in Sartaj Aziz's critically important document for institutionalised international action, "Hunger, Politics and Markets: The Real Issues in the Food Crisis", University of New York Press, p 27]. The factual basis of this diagnosis of the Bengal Famine seems eminently questionable.

The years 1942 and 1943 were of unprecedented inflation, mainly resulting from war expenditures, and the absolute level of prices moved rapidly upwards. But prices of different commodities did not move in the same



way, and there were sharp contrasts between relative rates. As an illustration, the rice prices and the exchange rates *vis-a-vis* rice of some indicator commodities in the Bolpur area of the Birbhum district are presented in the Table. The exchange entitlements were undergoing rapid transformation.

I have tried to go into the *causation* of the shifts in exchange rates elsewhere (in the forthcoming paper in the *Cambridge Journal of Economics*, referred to earlier), but the pattern of the shifts is itself of some interest. Unskilled rural wages were falling far behind rice price — indeed even money wages fell in *absolute* terms around November 1942 — and by May 1943, the wage-rice exchange index with December 1941 base (100) stood around 24. The rural labouring classes, which earn a high proportion of their incomes in the short-lasting 'peak' seasons, tend to be hit anyway by unexpected price rises, unreflected in the wages in the previous peak period. But on top of that, current wages were left far behind as food prices moved up. This was reinforced in certain regions of Bengal by a direct decline in employment, arising from loss of agricultural activity due to cyclonic destruction and fungus infection, the destruction and removal of boats, etc, and 'exchange entitlements' worsened for several groups more than the exchange rates might indicate.

Some classes undoubtedly ate better, benefiting from the newly created incomes in the war-inflated economy, and this expansion of demand exerted upward pressures on food prices. Others, e.g., rural wage earners, faced higher prices of food without a corresponding rise in money income (indeed sometimes with *reduced* money income and employment).

The catastrophic rise of rice prices during March-May 1943 was largely speculative. Reports of hunger had started coming in; panic had gripped Bengal; the somewhat smaller (but not unusually so) *aman* harvest was followed by a remarkably large withholding from the markets in the situation of inflation (and low money rates of interest); and anyone with money to spend was trying to build up a stock of rice.

The widespread economic distress led to restricted demand for 'superior' food items, e.g., fish, milk and for non-food commodities, especially services and

crafts, affecting in turn the classes supplying these commodities. The relative rates of pauperisation of different occupation groups, as calculated from the primary data presented by P C Mahalanobis, R Mukherjea and A Ghosh ("A Sample Survey of After-Effects of the Bengal Famine of 1943", *Sankhya*, Vol 7, part 4, 1946) tend to reflect this complex pattern of distress

(analysed in my forthcoming paper in the *Cambridge Journal of Economics* referred to earlier).

The FAD approach concentrating on over-all shortage of food supply seems to miss both the gross reality of the Bengal Famine as well as its finer details. The focus on exchange entitlements seems to permit a much more discriminating analysis.

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# Trends in Rural Unemployment in India

## An Analysis with Reference to Conceptual and Measurement Problems

K N Raj

*This paper is divided into three parts:*

*first, a review of the concepts and methods proposed for measurement of rural unemployment;*

*second, a brief comment on the available data relating to India; and*

*third, an interpretation of the findings from these data in the light of the institutional changes that have been taking place within the rural sector of the Indian economy.*

### I

#### Review of Concepts and Some Related Questions of Measurement

CONCEPTS of rural unemployment, and the methods of measurement adopted have grown in number, variety and in sophistication over the last two decades. Consequently, though several improvements have been made and data of various kinds are available for India, their interpretation and use have posed a number of problems. Controversies over refinements of secondary importance or of no great significance in the Indian context have also tended to overshadow the essentials and obscure the useful insights to be gained from the material collected over this period.

#### TWO MAJOR APPROACHES AND THE BASIC DIFFERENCE BETWEEN THEM

In the early fifties there were only two major concepts and methods of measurement to choose from. One linked rural unemployment with manifest, and to that extent open, inadequacy of productive work (interpreted as work contributing to income or gain of some kind). Such unemployment, associated mainly with households without land, or with holdings too small to absorb usefully the labour available within the family, was sought to be measured in terms of the number of days of idleness during a year (or a month) when — for reasons other than sickness, need for rest and relaxation, weather, ceremonials, etc — the members concerned could be regarded as available for work even if they were not actually seeking it.<sup>1</sup>

The second concept associated rural unemployment with the labour in peasant households that could be shifted to other activities without reduction in the output of these households; this

surplus, it was presumed, could be estimated by using norms of work and productivity considered appropriate for the purpose. Some changes in organisation, it was recognised, would be needed ("including possibly a consolidation of scattered strips and plots of land") for preventing decline in output after the surplus labour was shifted to other activities. Naturally the assumed norms of work and productivity had to be related to such changes.<sup>2</sup> Improvements in technical methods, it was however suggested, might be left out of account in this context, not because they were unimportant but for the reason that expert opinion seemed agreed on the view that "it is rather hopeless to try to introduce better farming methods unless the excess population is drained off first". The logical implication is that, to the extent that expert opinion takes a different view, feasible improvements in technical methods would also have to be taken into account in fixing the norms.

There is an obvious and important difference in approach between these two concepts.<sup>3</sup> The first rested on the premise that only those who were idle (wholly or partially) for want of work, and at the same time were available for more work, need be categorised as unemployed. The relevant criterion was the response of the individuals concerned to the employment opportunities (or the lack them) in the given situation. This concept has therefore been subsequently described as based on "the willingness criterion". The second concept identified labour as surplus (or as disguisedly unemployed) on the basis of norms of work and productivity independently derived, assuming that the labour so identified would or could be made available for any other activity. This concept has been categorised as one based on "the

productivity criterion" (or "the production aspect" of employment).

But there is another and more general way of bringing out the basic difference between the two. Since the subjective perceptions and probable responses of the persons concerned are crucial to the first, the estimates of unemployment based on it could be regarded as reflecting the excess supply of labour *currently available* from the *individuals* constituting the labour force in the given situation. Since these subjective factors do not figure explicitly in the second, and what is crucial to it are the norms independently derived on wider social considerations, estimates based on this concept reflect essentially the *potential* surpluses, with the accent on their *social* dimension rather than on the condition and outlook of the individuals making up the total.

Stress on the potential, as distinct from the actual, was in some cases so total, when applying the concept of "disguised unemployment" to agrarian economies, as to exclude wage labour by definition from its purview and to denote thereby "only a condition" of family employment in peasant communities".<sup>4</sup> At the same time it was explicitly linked with organisational changes in peasant society as well as the alternative uses of labour for productive investment. It is therefore evident that it was conceived not as a mere statistical abstraction but as something that could and should be transformed into an effective and valuable supply of labour.

The difference in approach between the two concepts mentioned above, one reflecting the subjective perceptions and responses of the individuals concerned which condition their current availability, and the other certain social values and norms which re-



veal the latent potential, makes it possible to judge the relevance and usefulness of each of them according to the social and political assumptions which appear most appropriate in a given situation or for a particular purpose. This distinction between the factors relevant to current availability, and those which link up with the potential supplies of labour that could become available and would need to be coped with for achieving particular social objectives, helps also to classify the subsequent innovations and refinements in concepts and methods of measurement and judge their relevance and usefulness with reference to the same criteria. We shall consider four such innovations and refinements that can be identified in the literature on the subject, and comment on each of them from this viewpoint.

#### TIME AND POVERTY CRITERIA

The first of them linked unemployment with the intensity of work put in, measured in terms of days and/or hours of work, thus making it possible to measure different degrees of under-employment relatively to some specified norms of labour input.<sup>5</sup> Since everything here is measured in terms of the time dimension of labour input, this has been referred to as a concept of unemployment based on "the time criterion". It can however be viewed from another angle.

When the norms of labour input applied are drawn from currently prevailing practices and notions in the activity concerned, and data are collected not only about the work put in but the availability of each person for additional work, the estimates of unemployment so derived relate to excess supply of labour currently available within the given situation. But when the norms applied are based on other considerations, and the subjective responses of the individuals concerned as to their availability for more work are left out of account for any reason whatsoever, what the estimates measure in effect would be a segment of the potential supplies of labour conditional on the fulfilment of the assumptions made implicitly or explicitly. Much depends therefore on what interpretation is given to the data based on the so-called "time criterion" and why.

A second and more recent innovation has been to measure the extent of

acute poverty in rural areas, with reference mainly to minimum nutritional needs expressed in terms of calories, and then virtually equate the magnitude of such poverty with the magnitude of rural unemployment and under-employment. The reasoning given is that "if income of the under-employed is a relevant aspect in its measurement", and a high percentage of the rural population has such low incomes as not to be able to afford food intake for satisfying even their minimum nutritional requirements, there can be no other explanation except that "working members of the population are under-employed". From this has been drawn the inference that the available data on the level and distribution of consumer expenditure among rural households can be used to obtain "a rough measure of the extent of under-employment in the country"; and that the quantum of additional employment needed to raise incomes and levels of food intake to the minimum required is about as precise a measure of rural unemployment and under-employment as one may desire "if one wants to do anything about it."<sup>6</sup>

There are some obvious gaps and jumps in the above reasoning. It has been therefore criticised for overlooking the link between low income and low productivity, as well as for identifying unemployment with poverty and thereby impoverishing both notions "since they relate to somewhat different categories of thought".<sup>7</sup> These criticisms are valid, but only when the distinction is not made between estimates of currently available excess supplies of labour and estimates of potential supplies, the latter based on norms with wider social orientation and linked with organisational changes of the kind needed to make them effective. Though such a distinction has not been explicitly made by the authors of this particular innovation, it is only fair to observe that all they have done is to apply norms of minimum consumption for focusing attention on a dimension of the rural economy with reference to which additional employment opportunities might be created. Neither conceptually nor methodologically is it very different from measures of "disguised unemployment" and surplus labour based on applying norms of productivity. If the poor identified in terms of the criterion of under-nourishment (or any other)

are not necessarily under-employed in terms of days or hours of work put in — as appears to be the case to a large extent — those with such low productivity as to fall within the category of surplus labour are also not necessarily under-employed, since the intensity of work put in (measured in hours or days of work) tends to increase beyond a point both with low productivity and low income.

Those who believe that estimates of unemployment based on productivity norms could be of value are for this reason on rather shaky ground when they question the value of similar estimates based on socially-desirable consumption norms. If it is their view that "there is a good case for keeping 'poverty' as a concept distinct from 'unemployment', without of course assuming them to be independent of each other",<sup>8</sup> they must recognise that the case is no less strong for distinguishing between the concepts of 'low productivity' and 'unemployment', without of course assuming them to be independent of each other. On the other hand, a case could be made out, depending on the context and the purpose, for shifting the focus of attention to the socially desirable uses to which latent supplies of labour can be put, adopting either minimum consumption or minimum productivity norms (or both), provided adequate attention is given to the organisational and other changes required to make them effective.

#### CRITERIA OF 'CONDITIONALITY' AND 'RECOGNITION'

There are two more concepts of unemployment both of recent origin,<sup>9</sup> which call for comment. One is linked with what has been termed "the income aspect" of employment and the other with what has been described as "the recognition aspect". The former is not related to the level of income (or consumption) but to whether the emoluments (or gains) accruing are conditional on the work performed by the individuals concerned. "From this point of view, a member of a joint family farm working in the family farm is to be regarded as unemployed if he would continue to receive economic support even if he did not work in that farm, but is to be taken as employed if his emoluments would cease if he stopped working in that farm." The other, the aspect of "recognition", takes explicitly into account the considerations of



self-esteem and status associated with employment, and which could make even some of the employed regard themselves as unemployed because they feel that their jobs are not adequate for their "purpose" (whatever that might be) or "commensurate with their training".

Now, if it is the case that a member's share of the income from a joint family farm is not conditional on input of work, the legal claim or social custom which entitles him (or her) to it is in effect a property right. This, like any other form of property holding, can be expected to effect the elasticity of supply of labour and thus the current availability of the individuals concerned for additional work.

But, while it is an important subject for investigation (studying the various factors, including property holding, which affect elasticities of labour supply for different categories of the population), identification of unemployment and measurement of the unemployed using this concept pose some very obvious and formidable problems. This will be evident from the predicament of any rural housewife confronted by an investigator who wants to know whether or not the economic support she receives from her husband is dependent on the work she puts in! Moreover, whether women engaged in farm work are classified as 'employed' or 'unemployed' by this criterion will depend on whether or not the divorce laws require the husbands to support them in the event of separation; if they do, the investigator will presumably have to categorise them as unemployed however much work they may actually be putting in.

What one can try to measure is the number currently working and the number currently available for more work, as well as the extent of their work and availability for additional work — though many problems arise even here on account of the complexity of organisation of activities in rural households, the difficulty of distinguishing economically gainful from other work, the diversity of the conditions in which additional work might be available (if at all), etc. In this context one can also probe into the nature of the work currently engaged in, and of the work sought additionally or in place of it, in order to judge whether or not to include them in the

category of the unemployed and under-employed.

But if one has also to probe into the various dimensions of individual and social relationships which govern their motivations for work and idleness, and *classify as unemployed* even those at work who are not available for additional work (on the ground that they would receive economic support from their families even if they did not work), we would be treading on very uncertain ground. This concept of unemployment based on conditionality of income has some analytical and pedagogic value, but has little to offer beyond that.

The "recognition aspect" has more to commend itself, since on it depends whether a person counts himself (or herself) as part of the labour force and reports the extent of work put in and availability for more work. A large part of what passes for work in agrarian economies could be indeed truly disguised unemployment, and yet the persons concerned may not regard themselves as unemployed, which again would affect the elasticities of supply of labour. On the other hand, if some of them do recognise the nature of their condition and should seek more substantive employment, they would deserve to be counted in among the unemployed.

But if taking this "recognition aspect" into account means that anyone whose occupation does not satisfy "some of the minimal expectations of the job-seekers" must be regarded as unemployed, it becomes a rather open-ended criterion and one can easily end up categorising all occupationally frustrated persons as unemployed. Even renaming this category as "misemployed" does not really solve the problem, since the expectations and aspirations of many people are not necessarily related to their capability.

There is only one way of saving what is sensible and valid in this approach. It is to specify which of the "minimal" expectations may be treated as legitimate for which category of persons. This would mean in effect drawing a distinction between current availability under the conditions as they are (including all the values, illusions and "ideology" generated by them) and potential availability on the basis of norms considered appropriate from a wider social angle taking into account all the relevant considerations,

the norms adopted in this case being extended to cover also what constitutes unemployment and employment for whom. This distinction is in fact already there, since some fairly remunerative occupations such as *thieving, smuggling, prostitution, illicit distillation, and professional goondaism* (sometimes in aid of respectable political activity) have not been given the status of gainful employment. It might be more useful to enlarge this list by stages, by including in it activities like *pavement hawking, transcendental meditation, and hair-splitting* of all kinds, instead of treating individual expectations and aspirations alone as a criterion for establishing yet another category of unemployment or under-employment.

To sum up, it would appear that the two major approaches to the identification and measurement of unemployment adopted from the early fifties still provide a fairly adequate basis for analysing the problem. "Unemployment", it has been correctly observed, "is a state of being without fruitful work and the perception of the fruitfulness of work is, to a large extent, a result of social conditioning."<sup>10</sup> It is obviously the function of economists as social scientists not only to measure it "in terms of the perception of the people caught by the statistician's slide rule" but to indicate how the nature and magnitude of the problem might change (or be transformed) if the social conditioning itself gets modified in certain directions (desired or otherwise), even though some may choose to do one and not the other.

The time, productivity and poverty aspects of the problem, and even "conditionality" of income and "recognition", could help not only to explain the factors underlying the current availability (or non-availability) of excess supplies of labour but to choose norms for estimating the magnitude of the potential supplies of labour that would need to be coped with to achieve objectives going beyond that of merely providing employment. But in deciding which aspect to emphasise or play down in what context, and how far, one has to depend on one's common-sense and judgment. Though the obvious criterion to adopt is that of relevance, this too depends both on individual perceptions and social conditioning, and so differences are likely to persist.

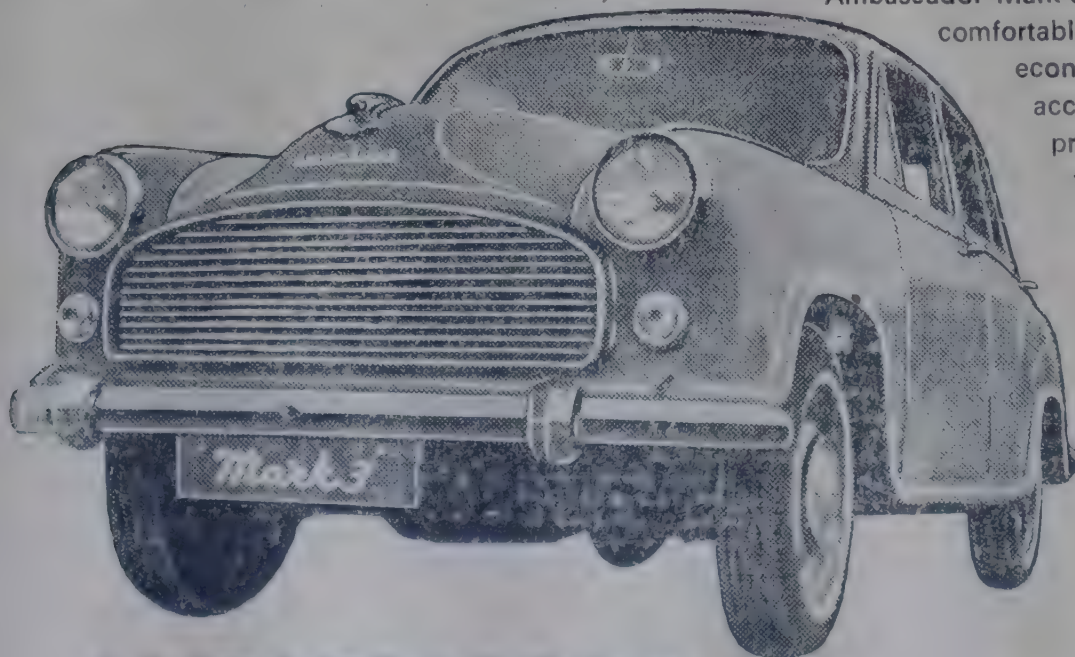
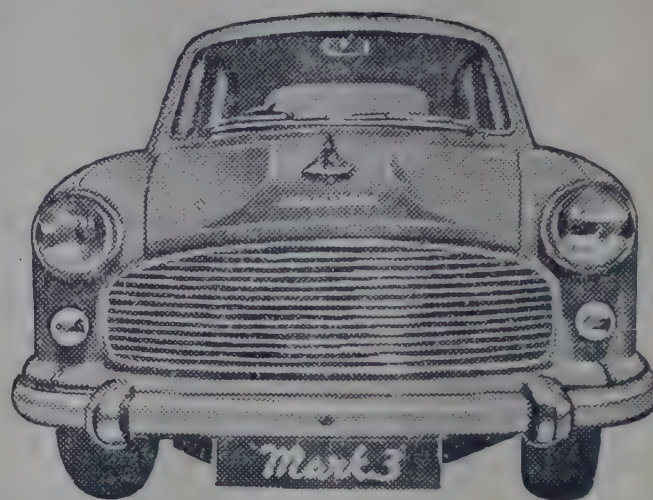
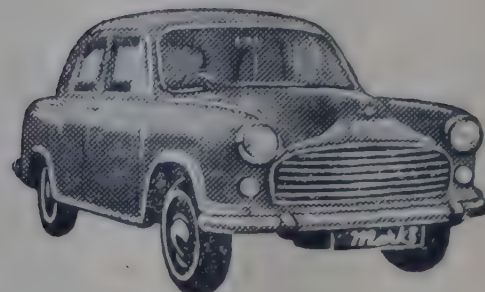


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One could however perhaps agree that all the aspects which appear relevant to a pure theorist might not seem so to one concerned with only their use for practical purposes; that the practical purpose may itself differ, depending on whether the persons concerned are by the nature of the circumstances persuaded (or required) to take the socio-economic framework as more or less unchangeable in the period with which they are concerned, or whether they are interested primarily in promoting a more radical change and motivated mainly by this objective; and that even the latter need perhaps to relate the concepts and methods of measurement chosen to their proposed programmes of action in some fairly explicit or obvious way.

## II

### Data and Estimates Relating to India

Estimates of rural unemployment in India differ within a very wide range. These differences are mainly on account of some being based on concepts reflecting current availability of labour and some on concepts reflecting potential supplies for achieving specific objectives.

There are also differences between estimates based on the former type of concept. They are traceable to the length of the reference period adopted for eliciting information, the criteria and method adopted for identifying those in the labour force, the nature and extent of the additional questions asked for eliciting information and classifying the data collected, whether only particular categories of the rural population are taken into account (e.g. "agricultural labour families" and/or "marginal farmer households") or all rural households, whether the estimates cover the males as well as the females within each category or only the former (in view of the wide variations noticed in the responses of the latter), and whether the estimates refer to the number of persons unemployed at a point of time relatively to the total number in the labour force at that point of time (in which case they would have the dimensions of a 'stock') or to the extent of unemployment over a period compared to availability for employment, both measured in time (in which case they would naturally have the dimensions of a 'flow'). These differences, the factors

responsible for them, and the extent to which they affect the comparability of the estimates of unemployment so derived have been analysed in detail and very adequately in the literature on the subject.<sup>11</sup>

Similarly, there are also differences in the estimates of unemployment related to potential supplies of labour. They are partly due to the coverage of the rural population taken into account being not the same (for instance, by the exclusion of wage labour in some cases),<sup>12</sup> partly due to differences in the objectives set and therefore in the methods adopted, and partly on account of the adoption of different methods of estimation.

Though the estimates of potential labour supply and the uses to which they could be put to have opened up a wide range of important issues for further study and discussion, the interest in them has remained largely of an academic nature. This has been so mainly for the reason that organisational changes of the kind required for transforming the potential surplus into effective supply labour, and for sustaining them in productive employment, have appeared to be clearly far beyond the range of practical achievement given the existing structure of economic and political power in the country. The long-run consequences of these constraints can be serious, and the sense of impatience and frustration on the part of those who understand them is understandable; but estimates of disguised unemployment and of surplus labour are not necessarily the best way of overcoming them, and academic economists should not therefore have difficulty in understanding why their enthusiasm for the literature on this subject is not always shared by those who are required to produce estimates of more immediate use and relevance.<sup>13</sup>

Most of the recent effort put into improvement of estimates of rural unemployment has in consequence been based on the assumption that, from a practical point of view, it might be more useful to gain a clearer understanding of those characteristics of the currently available excess supplies of labour which appear most relevant for formulating policies and measures that could cope with them. This is the context in which the heterogeneous character of the available labour supply has been stressed and attention directed to secur-

ing data that would bring out the different dimensions of this mass without relying on a one-dimensional estimate of the magnitude of rural unemployment in the country.<sup>14</sup>

The heterogeneity of the available labour supply emphasised in this context has been primarily with reference to the characteristics of self-employment in household enterprises, qualitative differences among seekers of wage-employment, and their effect on the elasticity of labour supply — and not merely the heterogeneity traceable to differences on account of region, sex, age, etc, as it has sometimes been interpreted to mean. This will be evident from relevant extracts reproduced below from the Report of the Committee of Experts on Unemployment Estimates:<sup>15</sup>

At the outset, it is important to recognise that the labour supply available to the Indian economy for productive activity, whatever the criteria by which it is identified and estimated, is of an extremely heterogeneous character... a significant proportion of the labour supply is self-employed or unpaid family labour within household enterprises, and only a part seeks wage or salaried employment. The relative importance of these components differs considerably between rural and urban areas. The unpaid family workers consist mainly of women and children whose participation in economic activity is generally limited and who might not ordinarily be suppliers of labour outside their own individual household. Unlike these family workers, the participation of the self-employed or own account workers is usually as complete as the pattern of economic activity in the given industry or occupation and the availability of land and/or capital stock permits.... Similarly, there are important differences within the category of those who seek employment on the basis of contractual payments. Some of them have a base of self-employment (as in the case of operators of small holdings in the rural sector), while others have none, some are literate (or "educated"), other illiterate. These differences are important because they are relevant to the elasticity of supply of labour, the way in which a particular quantum and type of employment potential created by development is likely to get distributed, and the type and volume of unemployment that remains. In view of these characteristics of the labour force — preponderance of self-employment and a fairly large component of 'unpaid family workers' in household enterprises — there is very little likelihood of much chronic open unemployment throughout the year... On account of these diverse facets of the phenomenon, the problem of defining and measuring employment



as well as unemployment or under-employment becomes very complicated.

In view of the heterogeneity of the labour force discussed above, estimates of employment and unemployment need to be attempted for homogeneous segments of the labour force and/or population. Homogeneity needs to be ensured also in terms of the period of time covered by the estimates. In rural India, the predominance of agriculture leads to a marked seasonality of employment. The level of unemployment as well as the size of the labour force appear to change over different seasons of the year. It is therefore necessary to obtain separate estimates of the level of unemployment and other labour force characteristics for different seasons. Further, in view of the difference in the peak and slack seasons in different states, it is necessary to obtain separate estimates for each state.

The estimates of the level of unemployment so obtained should not ordinarily be aggregated and should be presented separately for each season or quarter and for different regions with sharp variations. As a result, we shall have not one estimate of unemployment but estimates indicating the range of variations over seasons and regions. People who remain unemployed even during the peak seasons in rural areas will probably represent the hard core of unemployed needing special study and attention.

One has only to compare these extracts with some of the criticisms made of the recommendations of this Committee to see that they were not altogether warranted.<sup>16</sup>

The estimates for India now available, including those based on improvements suggested for the purpose, have undoubtedly a number of limitations. The data based on the recommendations of the Expert Committee are also not yet available in full. Moreover there are serious problems of comparability of the data collected earlier.

Nevertheless, if all the data available from different sources from the middle fifties upto now on land and labour in the rural sector are closely analysed, and adjustments made to the extent possible for ensuring broad comparability, it is possible to gain some understanding of the main trends in rural unemployment over this period. More particularly, if it is borne in mind that the incidence of rural unemployment, and indeed its character, is closely linked with land holdings, and that current availability of excess supplies of labour are likely to be reflected most in the category of wage labour, it is possible

to gain some insights by analysing all the available data on the distribution of land-holdings, the activity status of those in the labour force, the number of days of unemployment for "want of work" among agricultural labourers, the differences between 'attached' and 'casual' labourers, etc. This is what is attempted in the following section. It will be evident that the insights that can be got by studying the trends in respect of these aspects of rural economic organisation and activity are quite useful (even if we set our sights no higher than the currently available excess supplies of labour).

### III

#### Trends in Rural Unemployment in India

The first step that needs to be taken for this purpose is to make estimates of the growth in the number of rural households over the period and of the total area of land operated by them. For estimating the growth in the number of rural households we shall depend on the findings of the decennial Population Censuses in regard to the total size of the rural population and the average size of rural households, and on simple projections of the two in the intervening period on the assumption that the increases in between proceed at the average rate per annum reflected in the estimates of increase as recorded over each decade. For estimating the growth in the total area of land operated by rural households we rely on estimates made by the National Sample Survey (NSS), as well as on those made by the State Agricultural Statistics Authorities (SASA) of the increases in total net sown area and current fallows (as reported later by the Ministry of Food and Agriculture of the Government of India).

The estimates of the National Sample Survey in respect of rural households show the average size of these households to be consistently lower than recorded in the population Censuses, presumably because households with relatively large-sized holdings (and relatively larger number of members per household) are not adequately represented in the samples.<sup>17</sup> This is the reason why the Census estimates of the size of rural households is to be preferred, and why they, together with those relating to the total rural popula-

tion, are used for estimating the total number of rural households.

#### DISTRIBUTION OF LAND HOLDINGS

The estimates of total net area sown and of current fallows, as made by the states (SASA), must be expected to differ from the National Sample Survey estimates of the total area of land operated by rural households, since there are important differences in the concepts and definitions adopted in the two cases.<sup>18</sup> Nevertheless, the NSS estimate for 1954-55 based on the 8th Round (approximately 336 million acres) is found to be fairly close to the total of net area sown *plus* current fallows as estimates by SASA (about 348 million acres). Moreover, while the subsequent NSS estimates (based on the 17th and 26th Rounds) show a significant fall in the total area operated (to about 330 million acres in 1961-62 and 311 million acres in 1971-72), the SASA estimates of the net sown area and current fallows show them to have risen to a total of 363 million acres in 1961-62 and about 376 million acres by 1970-71. Since there is little doubt that the total area operated has grown over this period, the percentage increases as reflected in the SASA estimates are applied to the total area operated as estimated on the basis of the 8th Round of the NSS in order to achieve at estimates for 1961-62 and 1971-72.

The NSS data on the operational holdings of rural households, available for 1954-55, 1961-62 and 1971-72, reveal the relative share of households with different-sized holdings in the total operated area in each of these years. From our estimates of the total number of rural households and of the total area of land operated by them (based on the adjustments described above), it is possible to work out the number of rural households belonging to each size-group of operational holdings, the total area operated by them, and the average size of the holdings in each size-group in 1954-55, 1961-62 and 1971-72. The results are summarised in Table 1.

It will be seen that growth in the number of landless rural households was sharpest between 1954-55 and 1961-62, by as much as 12 million. This was accompanied by a sizeable fall in the number of households with small-sized holdings, in fact to the extent of over 6.5 million, and by significant increases both in the total area operated



by this category of households and in the average size of their operational holding. It is known that large-scale eviction of tenants took place during this period. For instance, a recent study points out that "though it is true that in the context of tenancy reform all over the country millions of tenants have lost possession of the land they were cultivating, the bulk of those evictions seem to have taken place before the 1961 Census".<sup>19</sup> More than 50 per cent of households with leased-in land in 1954-55 had operational holdings of less than 2.5 acres in size and account for only about 7.5 per cent of the total area of land leased in (while those with operational holdings of between 2.5 and 10 acres in size accounted for more than one-third of the total number of households with leased-in land and for about the same percentage share of the total area of land leased in by all households taken together).<sup>20</sup> So, if there was large-scale eviction of tenants, and along with it division and/or sale of land by households with medium and large-sized holdings (in expectation of various kinds of land legislation), one might expect a significant reduction in the number of households with small-sized holdings along with increase in the average size of such holdings. It seems not unlikely that as much as one-half of the increase in the number of landless households (say, about 6 million) was on account of eviction of earlier tenant households by owners of land.

If this interpretation is correct, landless households, excluding those joining their ranks through such displacement, could not have much more than doubled in number between 1954-55 and 1961-62 (i.e., from 6.5 million to a little over 12 million). And, if the displacement of tenant households in the period after 1961 was on a smaller scale than in the preceding decade (as indicated by the study referred to above), the number so displaced between 1961-62 and 1971-72 being no more than, say, 3 million, the landless households excluding displaced tenant households seems likely to have increased by another 50 per cent or so during this decade (from a little over 12 million to about 19 million).

#### WAGE LABOUR IN AGRICULTURE: SOURCES OF SUPPLY AND DEMAND

The category of agricultural labour households includes not only the land-

TABLE 1 : GROWTH OF THE RURAL POPULATION AND THE DISTRIBUTION OF THE TOTAL AREA OPERATED BETWEEN RURAL HOUSEHOLDS ACCORDING TO THE SIZE OF THEIR OPERATIONAL HOLDINGS, 1954-55 TO 1971-72

	1954-55	1961-62	1971-72
<i>Total Rural Population*</i> (in million)	317.7	360.0	436.0
<i>Total Number of Rural Households</i> (in million)	61.0	69.0	80.0
Average number of members per households	5.21	5.22	5.51
Landless	6.6	18.6	21.9
Holders of small-sized holdings (0.01 to 2.49 acres)	27.6	21.0	26.3
Holders of medium-sized holdings (2.50 to 9.99 acres)	18.2	20.6	23.6
Holders of large-sized holdings (10 acres and above)	8.6	8.5	8.2

	1954-55		1961-62		1971-72	
	Total Area Oper- ated (in million)	Average Size	Total Area Oper- ated ** (in million)	Average Size**	Total Area Oper- ated** (in million)	Average Size**
<i>Total Area Operated and Average Size of Operational Holding</i> (in acres)	335.7	5.49	353.0 (329.6)	5.12 (4.78)	365.7 (310.6)	4.57 (3.88)
Landless	—	—	—	—	—	—
Holders of small-sized holdings (0.01 to 2.49 acres)	19.9	0.72	31.8	1.51	33.8	1.29
Holders of medium sized holdings (2.50 to 9.99 acres)	100.0	5.49	112.2	5.45	137.3	5.82
Holders of large-sized holdings (10 acres and above)	215.8	25.09	208.6	24.54	194.8	23.75

\* The total rural population in 1951 was 295.0 million, the number of rural households 56.0 million, and the average number of members per household 5.21.

\*\* Figures in brackets show the NSS estimates of the total area operated without adjustment for under reporting on the basis of the growth in the net area sown plus current fallows as estimated by SASA and reported by the Ministry of Food and Agriculture.

less but also those small-sized holdings which depend significantly on wage employment for their sustenance. From this point of view, it is the two categories taken together which we need to take into account in estimating the growth in the number of rural households from which labour-seeking (or available for) wage employment is likely to be forthcoming. Together, their number grew at the rate of over 2 per cent per annum over the entire period 1954-55 to 1971-72. Of course, not all households with small-sized holdings offer wage labour as employees — many in fact are also employers of wage labour for short periods in the busy season — but a high proportion of these households are likely to be sources of supply of such labour (even if they also happen to be temporarily 'employers' as well).

Over this period of 17 years taken as a whole, the total number of rural

households grew by 19 million. As much as 14 million of these were either landless or households with small-sized holdings. The remaining 5 million belonged to the category of households with medium and large-sized holdings, which were likely to be more or less sustained employers of wage labour (even if they also happen to be working on their own farms). Since households and holdings in this range have often got split merely to evade the impact of land legislation, and many of the operational holdings belonging to these categories of households are likely to have been much larger than reported, the growth of capitalist farming in India (interpreted here to mean farming based significantly on hired labour) over this period has obviously taken place through growth of holdings within this size-range. It is worth observing in this context that, while the average size of holdings among holders



TABLE 2 : PERCENTAGE DISTRIBUTION OF THE RURAL MALE POPULATION BY ACTIVITY STATUS (BASED ON NSS ESTIMATES)

	Aug-Sep 1952 (4th Rd)	May-Aug 1953 (6th Rd)	Oct 53- Mar 54 (7th Rd)	Sep 58- Aug 59 (14th Rd)	July 60- June 61 (16th Rd)	Sept 61- July 62 (17th Rd)	July 64- June 65 (19th Rd)	Oct 72- Mar 73 (27th Rd)
Own-account workers	40.01	25.04	29.68	27.47	22.72	21.94	18.11	[30.66]*
Unpaid family labour		14.72	11.97	11.24	8.82	7.96	5.95	11.83
Employers	1.20	0.74	1.09	0.80	5.79	4.52	13.83	NA*
Employees	18.13	17.55	16.02	15.30	16.60	15.83	13.69	21.92
Total gainfully employed	59.34	58.05	58.76	54.81	54.23	50.25	51.59	64.11
Unemployed	0.05	0.98	0.32	2.07	1.44	1.95	1.42	0.79
Total in the labour force	59.39	59.03	59.08	56.88	55.67	52.20	53.01	64.90
Not in the labour force	40.61	40.97	40.92	43.12	44.33	47.80	46.99	35.10
Total population	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

\* The estimate given under 'own-account workers' covers also 'employers' in the data so far published from the 27th Round; they relate only to the period October 1972-March 1973.

of small-sized holdings declined by as much as 15 per cent between 1961-62 and 1971-72, the average size of medium-sized holdings increased by nearly 7 per cent during this period and that of the large-sized holdings, even as they have been reported, has declined only by about 3 per cent.

It will be also noticed from Table 1 that increase in the average number of members per household took place essentially in the decade 1961-62 to 1971-72. There is evidence of simultaneous growth in the percentage of the rural population below the age of 15 years.<sup>21</sup> The number of dependants per earning member of a rural household is also therefore likely to have increased. No data are available showing how the increase in the number of members per household and in the dependancy ratio has affected different categories of rural households (particularly categories distinguished by the size of their operational holdings). However, the trends indicated above, taken along with the significant fall in the size of the operational holdings of households with already small-sized holdings, suggest very strongly that the pressure to seek wage employment outside their own holdings is likely to have increased during this period. As the size and age-composition of the households change, with the children born in the fifties growing into adulthood in the sixties, one must also expect that those who are compelled to seek such wage employment from these households would belong more to the lower age-groups.

#### DISTRIBUTION OF THE LABOUR FORCE BY ACTIVITY STATUS

There is ample evidence of all these tendencies reflected in the data collect-

ed on the rural labour force by activity-status and by age-group. Table 2 shows the percentage distribution of the total rural male population by activity status as estimated from different Rounds of the National Sample Survey. Though the estimates for the years upto 1958-59 are not quite comparable with those for the years after, on account of differences in the reference period used,<sup>22</sup> it will be noticed that 'own-account workers' and 'unpaid family labour' have been declining in their relative numerical importance right through (except in 1972-73, for which year however the data cover only the busy season), particularly from the early sixties; but that this has been accompanied to some extent by decline in the labour force participation rate and, even more significantly, by growth in the relative numerical importance of 'employees'. It will also be noticed that there has been a sharp increase between 1964-65 and 1972-73 in the relative numerical importance of 'employees', a feature which also finds confirmation in the estimates of male agricultural labourers available from the population Censuses of 1961 and 1971.

The picture becomes much clearer, and more comparable with that presented by the data in Table 1, when the absolute numbers under each activity status are worked out from the estimates of the total rural male population and of the relative shares of each category as given in Table 2. The results are given in Table 3.

It will be seen that the number of male 'employers' has risen from around 2 million in the fifties to well over 30 million in the sixties. This obviously reflects the tendency that has been in evidence among those who were earlier primarily landlords,

securing their income mainly by way of rent (and interest on loans extended to the tenants), to evict their tenants and become employers of wage labour, or continue much the same arrangements in disguise by reporting the erstwhile tenants as 'attached' labourers (remunerated perhaps on the same crop-sharing basis as before). The total number of male 'employers' by the late sixties corresponds fairly closely to the probable total number of medium and large-sized operational holdings at that time. It will be also noticed that the increase in the number of 'employers' is largely offset by decline in the number of 'own-account workers' and 'unpaid family labour'. The meaning is obvious.

There was no significant increase in the number of 'employees' upto 1964-65. The number so reported for 1972-73 needs to be treated with some caution at this stage, since the data relate only to the period from October 1972 to March 1973 which, for most parts of the country, is the busy season when the scale of wage employment is likely to be larger than in the year as a whole. Data collected in the 14th Round of the National Sample Survey (1958-59) — which was organised in six sub-Rounds with the same sample of households surveyed during each of the sub-Rounds — showed that the proportion of 'employees' among the total rural population was lowest in the months of May and June (9.4 per cent) and highest in the months of November and December (12.2 per cent). However, even allowing for such seasonal variations, it seems unlikely that 'employees', who are reported to have formed nearly 22 per cent of the total rural male population in the busy season of 1972-73, could have been less than 18 per cent of it



TABLE 3 : GROWTH OF THE RURAL MALE POPULATION AND ITS DISTRIBUTION ACCORDING TO ACTIVITY STATUS

(in million)

	Aug-Sept 1952	May-Aug 1953	Oct 53- Mar 54	Sept 58- Aug 59	July 60- June 61	Sept 61- July 62	July 64- June 65	Oct 72- March 73
Own-account workers	75.9	48.1	58.7	59.9	51.4	51.0	45.5	93.4*
Unpaid family labour		28.5	23.7	24.5	20.0	18.5	14.9	36.0
Employers	2.2	1.4	2.1	1.7	13.1	10.5	34.7	NA*
Employees	34.4	34.0	31.7	33.4	37.6	36.8	34.4	66.8
Total gainfully employed	112.6	112.5	116.3	119.6	113.7	116.8	129.5	196.2
Unemployed	0.1	1.9	0.6	4.5	3.3	4.5	3.6	2.4
Total male labour force	112.7	114.4	116.9	124.1	126.0	121.3	129.5	198.6
Total male population †	189.8	193.8	197.9	218.2	226.3	232.5	252.1	304.6

The estimate given under 'own-account workers' covers also 'employers' in the data so far published from the 27th Round; they relate only to the period October 1972-March 1973.

The estimates are based on data provided in the Report on the Population Projections Worked Out under the Guidance of the Expert Committee set up by the Planning Commission under the Chairmanship of the Registrar-General, India (July 1968)

the year taken as a whole. If this correct the number of male 'employees' in 1972-73 would have been at least 55 million, about 18 million more than in 1961-62. Corrected Census estimates for 1971 reveal that the number of those classified as male agricultural labourers has risen from 15 million in 1961 to over 30 million in 1971.<sup>23</sup> There is therefore no reason to doubt that there had been a substantial increase in numbers under this category. All this is entirely consistent with the tendencies and pressures in the rural sector of the economy described earlier.

One more feature of the activity status of the rural labour force, and its implications for interpreting the data on rural unemployment, needs to be mentioned. In the case of the self-employed, particularly in agriculture and small-scale industries, ascertaining the deployment and availability of labour time is beset with many difficulties. This is much less of a problem in the case of 'employees' dependant mainly on wage labour.

#### DISTINCTION BETWEEN 'CASUAL' AND 'ATTACHED' LABOURERS AND ITS SIGNIFICANCE FOR ESTIMATES OF RATES OF UNEMPLOYMENT

Among those dependant on wage employment in the rural sector, a distinction has to be drawn between 'casual' and 'attached' labourers. This was done in the First and Second Agricultural Labour Enquiries, but has been abandoned since then.<sup>24</sup> The available data from the 11th and 12th Rounds of the National Sample Survey, which were integrated with the second Agricultural Labour Enquiry, reveal however on closer ana-

lysis how important the distinction is for the interpretation of data on the rate of unemployment among agricultural labourers — particularly when this rate is expressed in terms of the number of days on which they are unemployed for "want of work" expressed as a percentage of the number of days in a month when they are in the labour force.<sup>25</sup> It will be clear from Table 4 that the rate of unemployment among attached adult male agricultural labourers was much lower in 1956-57 than among casual adult male agricultural labourers; and that the relative importance of attached labourers varies considerably from state to state. If the overall estimates show a decline in the rate of unemployment, it could therefore be a reflection of 'attached' labour growing numerically in importance relatively to 'casual' labour in some of the states. Incidentally, it will be noticed that the ranking of states according to the rates of unemployment among agricultural labourers in 1956-57 and 1964-65 corresponds fairly closely to the ranking of states according to the rates of unemployment among all rural households in 1972-73 (see Table 5).

Table 5 shows the wide variations in the rate of unemployment, from month to month, among the casual adult male agricultural labourers. As similar data have not been collected on an all-India basis since then, it is difficult to say anything about the trends in the sixties, but it is not unlikely that (a) there was an earlier phase in which the tenants displaced from land were reabsorbed mainly as 'attached' labourers, (b) that the growth in the number of 'employees' in the rural sector towards the second half of the

sixties and early seventies has been largely under the category of 'casual' labourers; and (c) while 'attached' labourers in many parts of the country still retain probably all the characteristics associated with semi-bondage, some in the technologically advanced regions (such as in Haryana and Punjab) might be gaining some privileges additionally to the assurance of more continuous employment than is available to 'casual' labourers.<sup>26</sup>

The very considerable growth in the number seeking and/or available for wage employment, and the high probability that only a small segment of them are likely to have got absorbed as attached labour with assured employment along with other relatively favourable terms, suggest that there has been in all probability sharp accentuation in the scale and intensity of rural unemployment as well as in the conditions of employment in recent years, particularly among casual agricultural labourers, and in certain regions of the country where they form a large part of the labour force dependant on wage employment.

#### IV

#### Conclusion

It appears that much work remains to be done, and can be done, even with the available data to throw light on important aspects of rural unemployment and on the policy implications arising therefrom. There is undoubtedly also scope for some conceptual and methodological improvements. But if the latter become the major pre-occupation and obsession, and time and energy are wasted on needless hair-splitting exercises, this might well be interpreted, and perhaps correctly, as



TABLE 4 : RELATIVE IMPORTANCE OF CASUAL AND ADULT MALE AGRICULTURAL LABOURERS IN DIFFERENT STATES AND THE RATES OF UNEMPLOYMENT AMONG THEM, 1956-57

State	Percentage Distribution of Agricultural Labour Households		Rate of Unemployment (days unemployed for "want of work" as per cent of days in the labour force)	
	Casual	Attached	Casual	Attached
Uttar Pradesh	64.3	35.7	16.7	6.6
Madhya Pradesh	61.8	38.2	13.9	2.6
Bihar	54.5	45.5	22.0	21.0
West Bengal	84.6	15.4	25.2	5.5
Orissa	80.9	19.1	20.2	4.5
Assam, Tripura, Manipur	41.7	58.4	4.7	3.5
Andhra Pradesh	83.3	16.8	22.8	0.5
Madras (Tamil Nadu)	85.0	15.0	34.4	10.2
Kerala	86.3	13.7	37.4	31.5
Bombay (Maharashtra, Gujarat)	81.3	18.7	15.9	3.8
Mysore (Karnataka)	88.4	11.7	17.3	6.4
Rajasthan	84.2	15.8	22.0	1.8
Punjab, Delhi, Him Pr (incl Haryana)	50.7	49.3	25.0	2.1
Jammu and Kashmir	28.1	71.9	1.6	10.5
All India	73.5	26.5	22.3	8.8

Source : The National Sample Survey, No 33, Tables with Notes on Wages, Employment, Income and Indebtedness of Agricultural Labour Households in Rural Areas (July 1960), Statistical Table, Part One, Table (1), (4) and (5).

only a sign of "disguised unemployment" and therefore of a "surplus" among economists which, if shifted to professions like philosophy or even astrology, might be more productive!

Needless to say, the distinction drawn between estimates reflecting different dimensions of rural unemployment — some measuring the number of persons unemployed or under-employed (estimated on the basis of some clearly specified norm) and others the intensity of unemployment or under-employment measured in terms of time — and the importance of the norms adopted in each case when collecting and interpreting data, must be borne in mind in all empirical work on the subject. The sub-sets identified among the rural population (e.g. the "poor", the "idle" and the "willing"), and the various possible permutations and combinations, can also be useful for policy formulation. Though all these distinctions are in a sense obvious, it is evident from the available literature on the subject that there has been considerable confusion on account of failure to pay adequate attention to them.

Granted, their importance and usefulness, the main task remains however, namely how to allow for the institutional and other factors governing the response to questions about work and idleness, activity status,

income and consumption willingness and availability, etc, which are generally recommended for the purpose of empirical investigation. Detailed studies need to be therefore made about these other factors under different conditions and circumstances and how they affect attitudes and circumstances. Such studies will help in the future to collect, analyse and interpret data more meaningfully than is now possible on the basis of existing knowledge.

### Notes

[This is the revised version of a paper presented at the symposium on "The Concepts and Measurement of Rural Unemployment: Theoretical Issues and Empirical Findings" held at the Centre for Development Studies, Trivandrum from July 5 to 8, 1976. I am in debt to Krishna Bharadwaj and N Krishnaji with whom I had discussions at various stages in the preparation of the earlier draft, and also to the participants in the symposium and K Ranadive for helpful comments and suggestions for improvement.]

1 See, for instance, Agricultural Labour Enquiry, Report on Intensive Survey of Agricultural Labour: Employment, Underemployment, Wages and Levels of Living, Vol I, All India (Ministry of Labour, Government of India, 1954), Ch IV, p 26, and Appendices II and IV.

2 Ragnar Nurkse, "Problems of Capital Formation in Underdeveloped Countries" (Basic Blackwell, July 1952), Chapter II, pp 32-36. For a more detailed dis-

cussion of the organisational changes required, and the changes that might be adopted for mating surplus labour, see P Sanghvi, "Surplus Manpower Agriculture and Economic Development, with Special Reference to India" (Asia Publishing 1969), Chs 2 and 3.

3 K N Raj, "Employment and Planning in Under-Developed Economies" (Fiftieth Anniversary Commemoration Lectures, National Bank of Egypt, 1957). Lect see also Ashok Mathur, "Anatomy of Disguised Unemployment", *Oxford Economic Papers* (New Series), Vol 16, No 2, 1964.

4 Nurkse, *op cit*, p 33. Sanghvi the work cited above, does ever take into account agricultural wage labour as well as estimating the surplus.

5 See P C Mahalanobis, *For to Report on Some Characteristics of the Economically Active Population* (National Sample Survey Number 14, March 1959).

6 V M Dandekar and Nilalath, "Poverty in India" (1971), Ch VII, pp 124-126.

7 Raj Krishna, "Unemployment in India", *Economic and Political Weekly*, Vol VIII, No 9, 13, 1973; see also Amartya Sen, "Employment, Technology and Development" (Clarendon Oxford, 1975), Ch IV, p 38.

8 Sen, *op cit*, p 38.

9 *Ibid*, Ch I, pp 5-9 and Ch II, pp 36-40.

10 *Ibid*, p 40.

11 See, Appendices II and Pravin Visaria, in the Report of the Committee of Experts on employment Estimates (Planning Commission, Government of India, 1970). For a lucid and extensive treatment of all the issues, see Raj Krishna, "Unemployment: A Survey of Concepts and Estimates in India" (paper prepared for Symposium on Concepts and Measurement of Rural Unemployment: Theoretical Issues and Empirical Findings, held at Trivandrum from July 5 to 8, 1976).

12 See, for instance, Shakti Mehra, "Surplus Labour in Indian Agriculture", *Indian Economic Review*, Vol I, No 1, printed in P Chaudhuri, "Readings in Indian Agricultural Development", Allen and Unwin, 1972).

13 Sen considered it first remarkable that, "despite the fact that disguised unemployment in economies like India have been discussed more than any other kind of unemployment", the Committee of Experts on Unemployment Estimates "did not even have the occasion to discuss it as a separate approach to the measurement of unemployment in India".



TABLE 5 : MONTHLY FLUCTUATIONS IN THE RATE OF UNEMPLOYMENT AMONG ADULT MALE CASUAL AGRICULTURAL LABOURERS, SEPTEMBER 1956 TO AUGUST 1957

	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Uttar Pradesh	14.0	13.0	9.9	12.8	14.2	9.5	5.4	7.7	15.3	22.0	16.1	10.8
Madhya Pradesh	6.1	7.4	10.4	8.9	14.8	7.1	18.0	11.0	9.8	7.0	4.5	2.7
Uttaranchal	17.5	21.7	29.9	11.8	30.0	28.8	11.4	17.6	34.0	27.2	16.5	14.9
West Bengal	32.9	39.0	31.3	3.6	14.7	22.5	11.3	19.4	28.1	26.0	11.7	13.3
Assam	19.1	25.1	26.0	16.4	18.2	13.4	18.8	11.4	17.4	14.5	15.8	6.7
Arunachal Pradesh, Tripura, Manipur	0.0	10.7	0.0	0.9	5.0	2.8	6.2	5.9	0.2	0.8	0.9	0.0
Andhra Pradesh	17.2	35.6	22.6	14.8	12.0	10.9	22.6	18.4	24.9	11.0	12.0	11.1
Karnataka (Tamil Nadu)	20.7	23.0	38.8	33.0	31.1	23.6	21.6	25.4	35.1	30.3	26.8	28.6
Goa	29.2	30.0	44.1	30.2	28.4	38.2	35.7	34.1	30.3	41.4	44.2	39.3
Goa (Maharashtra, Gujarat)	20.8	8.0	12.2	8.7	10.8	15.2	8.2	26.5	15.4	10.5	10.0	9.8
Karnataka (Karnataka)	15.8	15.9	10.4	9.8	13.1	19.7	27.4	25.8	19.0	11.0	10.2	14.6
Uttaranchal	17.3	28.6	4.3	18.1	14.3	6.0	11.2	34.5	2.6	11.4	21.0	6.2
Uttar Pradesh, Delhi, Himachal Pradesh	14.7	19.1	8.0	17.3	21.2	8.2	29.5	5.2	8.2	7.7	12.7	15.0
Jammu and Kashmir	0.0	0.0	0.0	0.0	100.0	100.0	82.7	0.0	0.0	0.0	0.0	0.0
India	19.4	20.5	22.0	14.3	17.6	18.2	14.4	18.0	23.2	19.0	15.4	13.9

Source : The National Sample Survey, No 33, Statistical Tables, (Tables 15.0 to 15.53).

Amartya Sen, "Dimensions of Unemployment in India", Convocation Address at the Indian Statistical Institute, December 1973). Later, he recognised (though only in a rather inconspicuous footnote) that the Committee "was, of course, restrained by its terms of reference 'to go into the estimates of unemployment worked out for the previous Plans and the data and methodology used in arriving at them and advise the Planning Commission on the various issues concerned therewith, in particular, the alternative methods of analysis, computation and presentation that may be adopted for the Fourth Five-Year Plan (1969-74) in the ten-year perspective of 1969-79'; but went to add that "whether feeding the public with relevant information on employment and unemployment falls within these terms of reference, is a matter of interpretation" (Sen, "Employment, Technology and Development", 1975, p 118, n). How far the available estimates of "disguised unemployment" and of surplus labour could be regarded as "relevant information" in this context, even for "educating the public", is indeed a matter for interpretation based on one's judgment, particularly in view of the various limitations of these estimates which Sen himself has commented upon (*ibid*, pp 127-131). But what indeed does seem remarkable is that Sen pays little attention to open unemployment among agricultural labour households, in the process of concentrating on "disguised unemployment" among cultivator households and almost identifying the entire surplus labour in the rural sector with only the latter. The oddity of the four southern states having extremely low rates of "disguised unemployment" according to the estimates cited (the

'maximal' estimates for Tamil Nadu, Karnataka, Kerala and Andhra Pradesh are only 21.4, 12.7, 8.9 and 0.0 per cent respectively) is passed over merely with reference to the productivity norms used for the estimates and by the remark that they would be higher if different norms were used. That these are states in which open unemployment among agricultural labour households is very high is apparently not a matter of sufficient relevance to deserve explicit mention in this context.

14 "....one of the major shortcomings of the estimates of unemployment presented in the Plan documents has been their high degree of aggregation, except for a special reference to the problem of educated unemployment, i.e. those educated upto matriculation or higher level". *Op cit.* Report of the Committee of Experts on Unemployment Estimates, p 13. The "one-dimensional" estimates referred to in the Committee's Report, it needs to be noted, were those that were being presented till then in the Indian Five-Year Plans.

15 *Ibid*, Ch III, pp 14-16.

16 Sen argues for alternative estimates of unemployment being offered corresponding to different "aspects" of employment. There is certainly a good case for doing so, if all the "aspects" mentioned are indeed capable of being measured. Without going into this question of measurability, and that of relevance in the given context, he assumes that the Committee had ignored without good reason the "productivity", "income" and "recognition" aspects which he considers the crucial ones, and goes on to observe that its case for a multi-dimensional approach to the measurement of unemployment is based on nothing but "a streak of

confusion that seems to run through the whole discussion on unemployment estimation". Cf Sen "Dimensions of Unemployment in India", pp 3-4, and "Employment, Technology and Development", Appendix A, pp 116-118. Raj Krishna also, while listing three propositions which the Committee is supposed to have made in criticism of the existing NSS estimates, shows some misunderstanding of the position of the Committee. For instance, when the Committee pointed out that those recorded as 'unemployed' during the reference period of one week were not necessarily unemployed throughout the year, it was not its intention to suggest that only the chronically unemployed were a serious problem; it was merely to underline the fact that those so classified might also be "under-employed" like the others identified as such. Similarly, when the Committee questioned the usefulness of measuring intensity of employment with reference to "hours of work", it was for the explicitly-stated reason that labour requirements in the case of agriculture, small-scale industries, etc could not be reduced to a standard pattern for even a particular season; without commenting on the validity or otherwise of this consideration, Raj Krishna merely asserts that measurement of underemployment by the "hours criterion" and its conversion into "equivalent full-time mandays" of unemployment is essential for computing the cost of public works programmes, and that such information could be considered as of no use for policy purposes only "if the government had no intention of doing anything about unemployment". "Unemployment in India", *op cit.*

17 The estimates for the rural population for some years, as from the



TABLE A

Period	NSS			Year	Census		
	No of hlds (in mn)	Average hh size	Total popn (in mn)		No of hlds (in mn)	Average hh size	Total popn (in mn)
October 1950 to March 1951	55.78	5.21	290.63	1951	—	—	294.87
July 1954 to April 1955	65.66	4.90	321.73				
July 1960 to June 1961	69.91	5.04	352.36	1961	68.95	5.22	360.14
September 1961 to July 1962	72.47	5.12	371.03				
July 1971 to September 1972	78.37	5.34	418.50	1971	78.60	5.51	435.58

[I am indebted to N Krishnaji for assistance in compiling these data and giving me guidance for estimating the number of rural households for different years.]

NSS and from the decennial population censuses, are given in Table A.

18 See National Sample Survey, Report No 215, Tables on Land Holdings, All India, (February 1976), 'Note on Estimates of Aggregates', pp 5-6.

19 P S Appu, "Tenancy Reform in India" (mimeo), Chapter III

(Planning Commission, New Delhi, June 1975).

20 Cf K N Raj, "Ownership and Distribution of Land", *Indian Economic Review*, Vol V, No 1, April 1970. See Table 2.

21 See Report on the Population Projections under the Guidance of the Expert Committee set by the Planning Commission under the

Chairmanship of the Registrar-General, India (July, 1968).

22 Visaria, *op cit.*

23 Census of India, 1971, Series I, India, Miscellaneous Studies, Paper I of 1974. Report on Resurvey on Economic Questions, Some Results (Office of the Registrar-General and Census Commissioner of India, New Delhi). A high proportion of male agricultural labourers, it had been found even earlier, belonged to the lower age-groups. Visaria, *op cit.*

24 See V K R V Rao (ed), "Agricultural Labour in India" (Asia Publishing House, 1962), also Daniel and Alice Thorner, "Land and Labour in India".

25 This method of measurement corresponds to the one based on 'flows' referred to in Raj Krishna's paper on "Rural Unemployment: A Survey of Concepts and Estimates for India", *op cit.*

26 See, for instance, Sheila Bhalla, "New Relations of Production in Haryana Agriculture", *Economic and Political Weekly*, Vol IX, No 13, Review of Agriculture, March 27, 1976.

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# Settlements, People and Jobs

Nigel Harris

*As a result of the unprecedented growth of the world economy since the Second World War, there has been a systematic increase in the expectation of life at birth and in the general health status. This achievement has, however, been interpreted as a catastrophe. The system's capacity to employ, let alone house, the people it has ensured stay alive has been shrinking.*

*The disjuncture is not simply between the supply of workers and the availability of jobs, but the areas where the available labour force has increased are not those where jobs are most easily created.*

*When governments are unable to raise the rate of creation of jobs — or even to sustain the existing level of jobs — they are almost invariably tempted to make the job-seeker the scapegoat. Whether it is the argument that there are too many people — rather than too few jobs — or that migration should be curbed, controlled or rendered illegal, the efforts are of the same kind: meeting the inability to sustain economic growth by an assault on the victims of this failure.*

*An examination of the redistribution of the population allows us to see the common character of the process and the absence of any universal 'flood' of people between areas. It helps to bring prescriptions back to the basic task: economic development.*

## I

THE unprecedented growth of the world economy since the Second World War has had contradictory results. It has improved the levels of livelihood of a larger number of people than ever before. As a result, there has been a dramatic increase in the expectation of life at birth and in general health status.<sup>1</sup> In the second half of the 1930s, the average expectation of life at birth in the less developed countries (LDCs) was about 32 years and had probably not changed much since the time of the Roman Empire.<sup>2</sup> In just thirty years, roughly, 18 years have been added to this figure. The average however conceals wide variations — the variations in the success achieved in raising *per capita* incomes variations between Latin America's 59-60 years, and Africa's 39-50 years. Nevertheless, the sustained economic growth which for the first time in the more developed countries (MDCs) brought within the reach of the mass of the population cheap cars, consumer durables, house ownership and regular holidays, brought elsewhere an even more remarkable increase in the chances of surviving.

The greater the success in this endeavour, however, the more it has been interpreted as catastrophe. The system's capacity to employ, let alone house, the people it ensured stayed alive was apparently shrinking (not, that its capacity to employ and house people even before rapid world population growth began was impressive). The success achieved in inducing people to leave low productivity agriculture now seemed threatened by its inability

to utilise them in high productivity industry. But the supply of labour cannot be turned off with the speed at which labour demand changes, and in this lurked the terrors and the hysteria.

The disjuncture is not simply between the supply of workers and the availability of jobs. The areas where the available labour force increases are not those where jobs are most easily created, nor where the facilities are available for training job-seekers. The "free market" philosophy would imply that in such circumstances, workers and their families should move to the places where jobs are available. Yet the man-made obstacles to this redistribution are now considerable — in the main between countries, but also between provinces, regions, between village and city, between the zoned districts of a city, and, in some cases, even between the caste-controlled streets of a village. The obstacles are almost invariably designed to protect the privileges of higher income and status. The enhanced capacity of richer areas to create jobs is thus reserved for those groups already in occupation.

The resistance to movement in response to changes in job location is only one side of the coin. When governments are faced with an inability to raise the rate of creation of jobs — or even to sustain the existing levels of jobs — they are almost invariably tempted to make the job-seeker the scapegoat. Whether it is the argument that there are too many people — rather than too few jobs — or that migration should be curbed, controlled or rendered illegal, whether it is the notorious barbarities of compulsory sterilisation

(that invariably hits those least defended, the poor) or the forcible clearing of slums, squatter settlements or pavement dwellers without providing any other alternative for those dispossessed, the efforts are of the same kind: meeting the inability to sustain economic growth by an assault on the victims.

An examination of the redistribution of the population allows us to see the common character of the process and the absence of any universal "flood" of people between areas. It helps to bring prescriptions back to the basic task: economic development.

## II

Within the world economy, there are a number of areas that make a disproportionate contribution to growth and possess a disproportionate capacity to create jobs and incomes. These areas may span more than one country (or parts of several countries), but in each case, they have at their core a group of cities. They include the three key regions of the United States — the Boston-Washington, Great Lakes and Los Angeles-San Francisco areas; the core of the European economy, the so-called Frankfurt-Paris-Amsterdam triangle; as well as a series of smaller areas — the Tokyo-Osaka corridor, or the Central Industrial Region of the Soviet Union. The effect of growth in these areas is to stimulate the whole world economy, to draw in capital and labour from the rest of the surrounding country and the world.<sup>3</sup>

Virtually all countries are obliged to control their external boundaries — through currency control, tariff and



quota provisions, differential pricing — to prevent the pull of the advanced areas impoverishing the rest of the world. This factor is possibly one element in reproducing within national boundaries a pattern of economic concentration comparable to that in the world as a whole, with industrialisation affecting relatively few places.

Differential rates of population growth provide one indirect method of assessing the differential rate of growth of jobs and incomes. There are at least four statistical dimensions of this redistribution of population: international migration, regional concentration within countries, urbanisation, and the redistribution of the urban population within metropolitan areas.

The dimensions are not exclusive. A Mexican villager who travels to a job in Los Angeles or Chicago, a Puerto Rican farmer who moves to New York, a cultivator's son from Jullunder district who works in London, an Arab or Turkish peasant who is employed in Cologne or Paris, — each one is simultaneously an international migrant, moving from a backward region to an advanced region, and a rural in-migrant to an urban area. Indeed, the terms are misleading. For Munich, Naples and Ankara become "rural areas", as Dublin does for Liverpool. In Europe, the bulk of international migration is "a classic illustration at the international level of the processes of urbanisation: essentially, the flight from rural and peasant areas to urban and industrial employment".<sup>4</sup>

The settlement effects in each case have similarities. Receiving areas are almost never prepared to meet the costs of economic growth, nor is the redistribution of income earned sufficient to compensate the losses of the sending areas. The process of growth in the advanced area is subsidised by the backward areas and by the migrant labour force — as illustrated in the *bidonvilles* of Paris and the deserted villages of Algeria or Mali, the rural depopulation of northern Portugal or southern Ireland and the slums of Marseilles or Birmingham. Remittances sent back to the villages by the city worker provide a little welfare underpinning for those left behind, but unless this flow coincides with the transformation of the rural economy, it is no more than a pension which must compensate in some cases for the life-long separation of families.

What is the picture in terms of movement of people?

#### INTERNATIONAL MIGRATION

The areas where rising labour demand makes itself felt vary with the skill required in the worker, his home rate of pay, as well as with geographical distance. Demand is very selective. It rises and falls with the tempo of economic activity in the receiving area. Nevertheless, despite the sensitivity of immigrants to changes in labour demand in the attracting area, the governments of those areas almost invariably seek to regulate migration in order to make it even more selective and even more flexible in relationship to short-run changes in demand. Explicit controls are, whether by intention or not, the easiest method of blaming the immigrant for whatever social ills afflict the natives, of focusing attention not on the ills but on the newcomer. Even if services in receiving settlements were equitably distributed, without adequate preparation, immigration would tend to increase deficits in the provision of housing and services, even though the economic contribution of immigrants is much greater than the costs of the services required. The hostility of the people in the receiving areas — of which immigration control is one symptom — re-enforces the effects of low immigrant income in segregating immigrants in areas of relatively poor housing and services. The resulting conditions are then used as the grounds to accuse the immigrants of being the cause of poor conditions.

Movement has, of course, not been solely between advanced and backward areas of the world economy. Six to seven hundred thousand Africans left Africa (1960-1970), mainly for Europe, but many others moved to the south and north of the continent, the two most important centres of employment creation. Furthermore, redistribution affected the sub-regions of the continent (for example, in West Africa) from the landlocked states further north to Ghana and Ivory Coast. Similarly, while the best known movement of Latin Americans is northwards to the United States, they have also been moving from Bolivia, Chile and Paraguay to Argentina, and from Colombia to Venezuela. By contrast, in Asia, movement within the continent is very small.

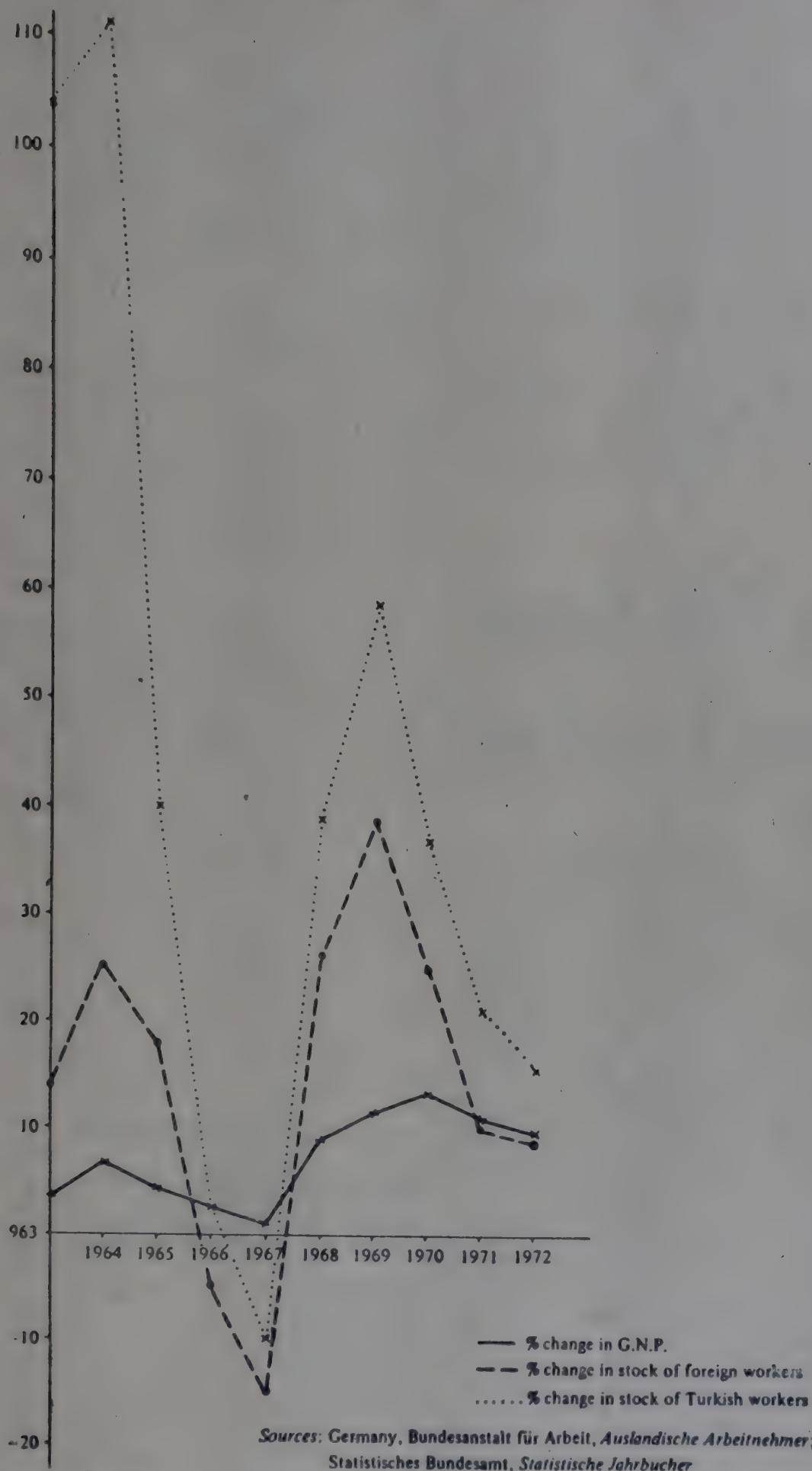
The proportion of total populations

involved is small, but since emigration is drawn from particular localities (and skill groups), the effects can be severe. In Africa in 1970, for example, those abroad as a proportion of the labour force ranged from 6 per cent in Morocco, 11-12 per cent in Algeria and Tunisia, 13 per cent in Malawi, 14 per cent in Botswana, and fully 21 per cent in Lesotho.<sup>5</sup> In terms of Yugoslavia's provinces, emigration took less than two per cent of the population of Montenegro, but over 4 per cent of Croatia.<sup>6</sup> In skill groups, the effects are more severe. Initially, emigration seems to draw on the most skilled and so makes worse some of the most constricting bottlenecks of backwardness. Emigration does not necessarily reduce educated unemployment so much as increase the scarcity of the least abundant grades of educated manpower. The position is at an extreme in the case of the "brain drain" — roughly two-thirds of those graduating in medicine left Thailand in 1968 (for how long is not clear), and a fifth in India, the Philippines, Turkey, Haiti and Nicaragua (in different years and for different periods of time<sup>7</sup>). The export of skills is a net subsidy (in terms of the costs of raising and training the emigrating skilled workers) to the receiving country, only partly offset by any remittances returned to the sending country.

Immigration to Europe since the Second World War illustrates the dramatic effects of changes in labour demand. The sending countries have been mainly six countries of southern and two of northern Europe (Greece, Italy, Portugal, Spain, Turkey and Yugoslavia; Finland and Ireland). All the sending countries have a high proportion of their active population employed in agriculture (from a quarter in Italy and Finland to three-quarters in Turkey). Net emigration from the eight countries was possibly six million people by 1970, taking a quarter to a third of the natural growth of the population and possibly a half of the increase in the labour force. In some cases, the situation is more severe — emigration from Portugal for long periods took numbers equal to two-thirds of the natural population growth, producing severe depopulation in some northern districts; in Ireland, up to 1962, net emigration exceeded the rate of natural increase, but without this "reduction of population pressure" in any way promoting economic growth.



FIGURE: CHANGES IN FOREIGN WORKERS, TURKISH WORKERS AND GNP IN WEST GERMANY, 1963-72



From Paine, Suzanne: "Exporting Workers: The Turkish Case", Department of Applied Economics, University of Cambridge Press, 1974, p 63.

Labour demand in the receiving countries, predicated in sustained rates of economic growth, has been exaggerated by a declining rate of natural increase in the active population; related to low birth rates, decreasing participation rates, and the decline of rural areas as a source of new workers. Immigration has provided the receiving countries, (Switzerland, West Germany, France, Sweden, Belgium) with new

workers equivalent to between a quarter and a half of the total population increase, and a larger share of the increase in the labour force. The locally born have been able to move into higher income — and less onerous — jobs. Immigrants followed the jobs vacated over time — from construction, farming and the service trades to the mass production metal trades. Today, between a fifth and a third of the

labour force in Swiss, Dutch and German metal trades is foreign-born, a change comparable to the growth in the employment of southern black migrants in the metal trades of the northern cities of the United States.

Emigrants to Europe seem very responsive to changes in labour demand. Of course, fluctuations are exaggerated by specific government measures, both to recruit foreign labour during boom and expel it during a slump. Foreign labour is a buffer against business fluctuations, "conjunctual shock absorbers".<sup>8</sup> The employing country does not bear the costs of raising the worker or, quite often, maintaining his family, and can use the foreign workforce to compensate for fluctuations in demand. Future growth, despite official disclaimers, is likely to produce an even greater use of this type of labour, particularly if it can be reduced to the status of strictly "contract labour"; by 1980, one observer estimates, eleven West European countries will have a labour deficit of 11 million workers.<sup>9</sup>

The size of immigration to western Europe illustrates the relative immobility of capital when only low wage levels are available to attract it abroad. The countries to which Europe exports capital are not the same as those from which it imports labour. The jobs immigrants do in Europe are often not transferable:

You cannot transfer a coal shaft to somewhere in Turkey simply because labour happens to be abundant there; the policy is also irrelevant for the large number of building workers: you cannot build the houses needed in Frankfurt in Sicily; nor is the proposition applicable to migrant workers in private services, domestic work, public transport or other public service occupations: if dustbins need emptying in Munich, the workers for the job must be found on the spot.<sup>10</sup>

Modern manufacturing has some greater degree of mobility, but it is still very limited — for example, from the United States to the northern districts of Mexico, or in very limited sections of component assembly, across the Pacific. But this is small beer in relationship to the demand for jobs.

The receiving countries — like the cities of LDCs receiving rural in-migrants — make very little provision for the adequate settlement of immigrants. Some of the larger firms provide dormitories for single employees, but there is little provision for families. Indeed, the burden of the costs of dependents unbalances some of the original profit from



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immigration, which is why governments have usually attempted to resist the immigration of families. At low levels of income — because of the trades where immigrants can find jobs — and without public provision, immigrants are shunted into the worst housing or create peripheral shanty towns. Poor nutrition because of low incomes can produce high sickness rates, which then provide the pretext for intensified discrimination. Immigrants in Britain have had remarkably little impact on housing, health or welfare services.<sup>11</sup>

#### REGIONS

Regional concentration on a world scale is matched in all countries by an equivalent "micro" concentration within national frontiers. High rates of growth in the core zones do not seem to reduce regional differentials in the MDCs, making the backward regions a recurring political problem — Scotland and Northern Ireland in Britain, south-western France, the Mezzogiorno in Italy, and a number of areas, the most notable being the Appalachians, in the United States. In the most favourable cases, average income in the backward region has been raised but without this ending out-migration or creating a regional economy capable of withstanding the removal of government aid or recession.

If the MDCs with a high degree of development spread over much of their land area find the reduction of differentials difficult, the problem must be even more severe where most of the countryside lacks basic services as in the LDCs. It would suggest that the less developed a country, the greater the likely degree of concentration of modern activities.

Certainly, the generalisation seems born out where rates of economic growth are highest. For example, in Brazil, Greater Sao Paulo includes in its 37 *municípios* about half of Brazil's installed industrial capacity, and contributes some 30 per cent of central government revenue. In smaller countries, the degree of concentration is likely to be even greater if economic growth rates are high. In India, there is some evidence to suggest that, despite sluggish growth rates, the two leading industrial areas, including their adjacent territories, have increased their share of national output. The statistics available relate unfortunately to states (which conceal the degree of concentration by including

large backward areas); but even then, in 1966, Maharashtra and West Bengal had over 40 per cent of national registered industrial employment, and together secured a slightly larger proportion of future licensed industrial investment. Within Maharashtra, Greater Bombay seems to have experienced a slight decline in its share of state capital, gross output and industrial employment in the 1960s; but if the areas adjacent to Greater Bombay are included, the share increased (to around 85 per cent of capital and output, and 70 per cent of employment).<sup>12</sup>

This tendency to regional concentration appears to be universal, and not necessarily affected by the form of government. For example, during a quarter of a century, of the People's Republic of China, the historical concentration of activity in the seven coastal provinces does not seem to have been altered. In the early fifties, these seven provinces (Liaoning, Hopei, Shantung, Kiangsu, Chekiang, Fukien, Kwangtung), with 40 per cent of the national population on 11 per cent of the land area, produced 68 per cent of national industrial production and 75 per cent if we exclude handicrafts (this included 85 per cent of national steel output, 48 per cent of coal, 90 per cent of electricity, 88 per cent of cotton cloth). Within the seven provinces, eight major cities produced 55 per cent of the provinces' industrial output. Despite sustained efforts to redistribute production towards the 20 or so inland provinces in the ensuing years, "from 1937 to the 1970s, there was little change in the relative shares of the regions in the gross value of output".<sup>13</sup> Of course, the basic statistical data is imperfect, and it could be argued that, without deliberate efforts, the degree of concentration would have been greater. Nevertheless, the lack of any sign of a crude redistribution suggests that the problem of regional inequality is much more intractable than often supposed.

The Italian Mezzogiorno experience illustrates some of the intractability. From 1950, the Italian Government diverted resources into the south to the value of US \$14.4 billion up to 1970, equivalent in the last half decade to 27 per cent of national investment. Over half of the sum went to investment in industry, a quarter in agriculture and some 13 per cent in infrastructure. The regional per capita income has been

trebled in current terms (and more than doubled in real terms), consumption remarkably increased and the employment structure radically altered. Roughly one million new jobs were created, but simultaneously 1.7 million left agriculture, and four to five million emigrated from the region. Despite all the efforts, employment in industry increased at a rate only slightly higher than the national. In 1975, in the midst of slump, the unemployment rate rose to two and a half times the national rate.<sup>14</sup>

#### URBANISATION

At the core of each advanced region is a city or group of cities, and the proportion of population in such cities is frequently seen as an index of social and economic change. It is a misleading criterion, since urban boundaries are arbitrary, and give no indication of the economic role a city plays. A city of mineworkers' families has a different significance to one of the same size of retired households. However, if we suspend statistical disbelief, the evidence does not support any general picture of an "urban explosion", nameless hordes "flooding" from country to town, or general urban inundation. The picture is as varied as the experience of economic growth.

First, the larger metropolitan areas are tending to increase their share of the urban population in all countries, and the tendency is stronger, among LDCs than MDCs so that, of a lower proportion of the population urbanised, a higher proportion may live in large cities. In India, 77 per cent of urban inhabitants lived in settlements of under 100,000 population in 1901, and 44 per cent in 1971. In smaller countries, this may mean an increasing proportion of the urban population living in one city, as Table 1 illustrates. From that data, it appears clear that there is little relationship between the tendency in urbanisation and the rate of growth of the total population.

Second, if we examine the performance of cities of one million population for which data is available (three-quarters of them), they fall into eight rough groups:

(i) Stagnating cities with around 10 per cent or less rate of population growth, (1950-1970) which cover those in Britain and both parts of Berlin (9 cities in all):

(ii) Old cities which had one million population or more in 1950, grew by less than 100 per cent and added



TABLE 1 : GROWTH IN THE TOTAL, URBAN AND LARGEST CITY POPULATIONS IN SELECTED LDCs, 1960-70

	Total Pop 1970	Per Cent Increase p a 1960-1970	Urban Pop 1970 (A)	Per Cent Increase p a 1960-1970	Largest City Pop (2 Cities for largest countries) (B)	Per Cent Increase p a 1960-1970	(B) as a Percentage of (A)
	(millions) 1	(per cent) 2	(millions) 3	(per cent) 4	(millions) 5	(per cent) 6	(per cent) 7
<b>Africa</b>							
Kenya	11.3	3.1	1.1	6.3	0.5 †	6.0 †	45.5
Tanzania	13.3	2.5	0.8	5.3	0.3 †	9.0 †	37.5
Ethiopia	24.9	2.2	2.4	6.9	0.7 †	5.2 †	29.2
Sudan	15.7	2.9	1.9	6.0	0.5 †	3.4 †	26.3
Zaire	21.6	4.3	4.7	3.9	1.4	9.1	29.8
Nigeria	55.0	2.9	9.0	4.7	1.5	8.7	16.7
Egypt	33.3	2.5	14.8	4.2	5.7	5.3	38.5
<b>Asia</b>							
China	771.8	2.0	162.3	2.9	Shanghai 10.0 Peking 7.0	—	6.0) 4.2) 10.2
Indonesia	120.1	2.0	20.9	4.3	4.3	6.0	20.6
Republic of Korea	30.7	2.6	12.7	6.2	5.4	12.9	42.5
Philippines	38.4	3.0	12.6	4.2	3.5	5.7	27.8
Thailand	36.2	3.2	5.4	4.7	1.6 †	—	29.6
Afghanistan	17.0	2.1	1.8	5.1	0.5 †	3.2 †	27.8
Sri Lanka	12.5	2.4	2.8	4.4	0.6 †	2.1 †	21.4
India	548.4	2.4	109.6	3.5	Calcutta 6.9 Bombay 5.8	3.3	6.3) 5.3) 11.6
Pakistan	62.0	2.1	14.7	4.5	3.3	8.0	22.5
Turkey	35.6	2.6	13.6	5.1	2.2	5.3	16.2
Iran	28.4	3.2	11.6	4.9	3.4	8.0	29.3
<b>Americas</b>							
Mexico	50.3	3.3	29.9	4.9	8.6	7.5	28.8
Venezuela	10.6	3.1	8.3	4.8	2.2	7.0	26.5
Argentina	23.8	1.3	18.4	2.3	8.3	2.4	45.1
Brazil	95.2	3.1	52.4	4.9	Sao Paulo 7.8 Rio de J 6.9	7.9	14.9) 13.2) 28.1
Colombia	22.1	3.6	12.6	5.3	2.6	5.5	20.6
Peru	13.3	2.8	7.1	4.2	2.5 †	5.1 †	35.2

† Kingsley Davis, "World Urbanisation 1950-70", basic data for cities, countries and regions, University of California Berkeley, 1969.

Note: Figures are rounded, and definitions of "urban" are those current in the country concerned.

Source: Derived from: "Urban-rural projections, from 1950 to 2000" (Provisional), Medium tempo with medium variant, October 1974, United Nations Population Division (print out).

"City Projections 1950-2000", (Provisional), Medium tempo with medium variant, December 10, 1974, United Nations Population Division (print out).

less than one million people up to 1970. Of the fifteen cases, only three were in LDCs (Mukden, Chungking and Hyderabad);

(iii) Large cities, with well over 1 million people in 1950, adding under 100 per cent but more than a million people by 1970. Again, of the 18 cases, five were in LDCs (4 in China and one in India);

(iv) Big cities, as under (iii) except increasing in size, (1950-1970), by over 100 per cent. Of the eleven cases, nine are in LDCs (seven of them national capitals);

(v) Newcomers, attaining one million population after 1950 and adding less than one million population or 100 per cent by 1970. Eleven of the 37 cities in this group were in LDCs (7 of the 11 were in China);

(vi) Growing cities, as with (v) but adding more than 100 per cent, but less than one million population. 14 of

the 24 cities concerned were in LDCs (including, for the first time, five Latin American cities; and also four Chinese);

(vii) Multiplying cities, as with (vi) but adding more than one million people up to 1970. Of the 13 cities, 11 were in LDCs, 10 of them in Asia and one in Africa.

(viii) High Flyers, cities which had not attained one million by 1950, but added well over one million people by 1970. All eight cities here were in LDCs, four in Latin America, two each in Africa and East Asia.

The summary form of this presentation makes no allowance for changes in urban boundaries (one of the primary methods of a city increasing its size), but it does isolate the relative scale of rapid growth. The impact of rapid world economic growth seems to produce the highest rates of population concentration in countries which are less developed: they overleap the "stages

of development". But even then the numbers are small, and the picture very varied. Furthermore, the effects of world economic growth appear to be declining over time — the rates of urban growth tend to fall between the fifties and sixties.

The mixed picture of urban growth is repeated in that of rural-urban migration. Low total population growth rates have supported both low and high rates of urban population growth, and very different distributions of the urban population. Table 1 illustrates this diversity, and the lack of any clear "population" explanation. Table 2 allows us to see the relative size of the numbers concerned, and the tendency for net in-migration rates to fall between the fifties and sixties. In the 1950s, more than two-thirds of the growth in LDC urban population came from net in-migration, whereas in the 1960s, it was just over half. In



the 1970s, it is likely that an even greater proportion of urban population growth will come from urban natural increase, particularly given relatively low rates of economic growth.

Economic stagnation could produce a rapid decline in net rural-urban migration, and such a state of affairs would be the mark of failure rather than success. There are considerable obstacles to rural out-migration already — the lack of hard information about urban opportunities, the fears of the unknown, conservative customs and rumours of disaster, as well as the costs of movement. This perhaps helps to explain why such a large part of the rural population tolerates markedly poorer conditions, particularly when it is clear that the experience of those who move is often favourable.<sup>15</sup>

Economic stagnation has other effects, comparable to those enumerated earlier relative to international migration. Increasing competition for jobs, housing and services can make the migrant an easy political and social scapegoat for the established order. The in-migrant like the immigrant, usually makes a disproportionate contribution to the growth of urban incomes (because migrants are likely to have fewer dependants and to be in the active age groups), but it in no way offsets discrimination, the obsession of the established city classes that the migrant is ruining "their" city. The social structure is stabilised at the cost of the victims.

Certain broad types of experience seems to stand out from the patterns of urban growth over the past twenty years. There are roughly four:

(i) countries with a very high proportion of their population urban, with low rates of growth, usually with very high per capita incomes and a medium to high rate of growth of income: the MDCs.

(ii) countries with a medium range of population in urban areas (a half to two-thirds), and a high rate of growth of urban population, primarily from high rates of natural increase; usually with a medium range of per capita income (US \$500 or more) and a relatively high rate of growth of income. Most of these countries are in Latin America and the Mediterranean, but some of the East Asian countries also approximate to this pattern.

(iii) countries with a very low proportion of the population urban (eight to twenty-five per cent), a high rate

TABLE 2: NET IN-MIGRATION TO URBAN AREAS IN SELECTED LDCs, 1950-1970

Country	Number (000)		As Percentage of Urban Growth	
	1950-1960	1960-1970	1950-1960	1960-1970
<i>Africa</i>	13,609	1,6504	69.2	56.5
Kenya	160	324	61.5	62.5
Tanzania	119	208	65.8	64.0
Ethiopia	494	977	83.7	81.7
Sudan	166	542	48.7	65.0
Zaire	2,550	158	96.4	10.5 <sup>a</sup>
Nigeria	1,243	1,970	60.9	58.6
Egypt	1,686	2,573	52.6	51.0
<i>Asia East</i>	59,803	39,195	77.8	56.5
South	23,829	39,314	50.9	50.5
China	49,678	23,528	79.2	19.3
Indonesia	2,824	3,916	60.5	53.7
Republic of Korea	2,360	4,402	76.5	74.6
Philippines	1,136	1,544	40.8	35.6
Thailand	703	932	53.7	46.7
Afghanistan	293	498	73.8	68.6
Sri Lanka	891	566	58.3	57.6
India	6,493	13,738	36.8	42.8 <sup>b</sup>
Pakistan	1,990	3,297	53.1	62.2 <sup>c</sup>
Turkey	2,548	3,301	67.2	61.1
Iran	1,036	2,491	45.1	55.7
<i>Americas</i>	19,252	26,370	51.2	46.8
Mexico	3,545	5,451	50.1	47.2
Venezuela	1,260	1,554	54.3	49.2
Argentina	1,457	1,807	39.9	48.8 <sup>d</sup>
Brazil	7,972	10,185	59.2	50.4
Colombia	1,048	2,311	32.5	44.5
Peru	675	1,127	47.3	46.3
LDCs	110,537	113,212	67.4	53.4

These figures are based upon the assumption that the total and urban population rates of natural increase are the same, and external migration is insignificant.

(a) this reflects a very high rate of total population natural increase, 1965-70, and may not be correct.

(b) It is not clear in the source figures whether this allows for the changed definition of "urban".

(c) this reflects an unusually low rate of natural increase in the total population, 1965-70.

(d) this reflects declining rates of natural increase.

Source: Derived from "Urban-Rural Projections", *op cit*.

of growth of urban population, a very low per capita income (under US \$250) but, given the low starting point, quite a rapid rate of increase. Such countries are mainly in Africa, but include also some of the poorer Asian and Latin American countries.

(iv) finally, countries with a low urban proportion (under 25 per cent), low rates of urbanisation (which does not rule out the possibility that some large cities increase by large absolute numbers), a low per capita income (under US \$150) and a very low rate of increase in income, with periods of decline. It is the last case which covers the major part of the LDC population, covering much of the Asian landmass.<sup>16</sup>

A low per capita income and proportion of urban population with a high rate of growth of income produces the most dramatic urban transformation, but — sadly — it is not the standard case. The growth of income would generate

the means to make the cities tolerable, even if they reached the large sizes occasionally predicted (predictions which assume the extension of city boundaries, so that densities fall as size increases). It is not the size of cities which ought to cause concern, but rather the income level, particularly given the pessimistic predictions currently available on future economic growth.

#### METROPOLITANISATION

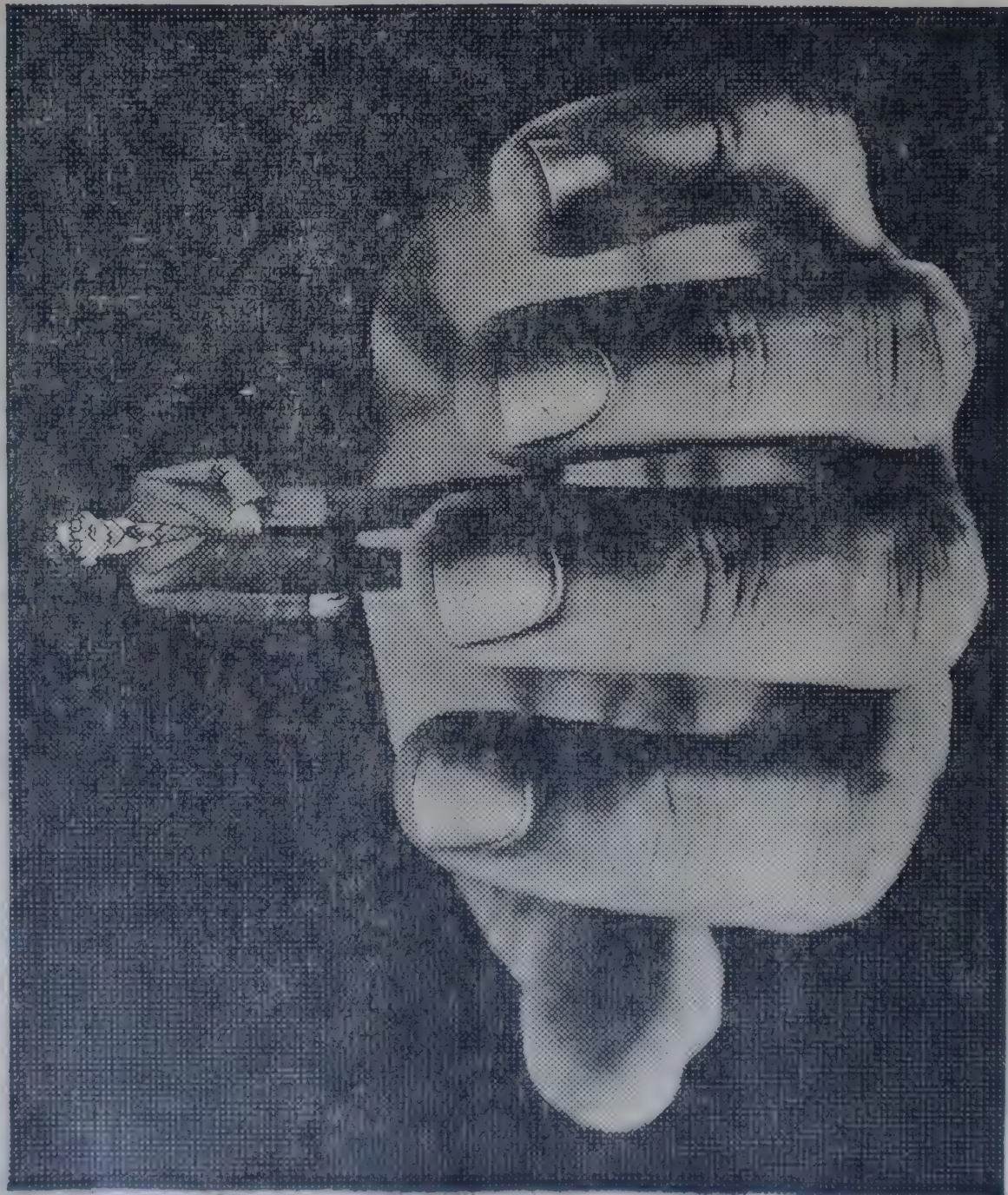
If there is an increased tendency for industry and population to be concentrated on a world and national scale, there is a contrary tendency towards dispersal within the regional concentration, the metropolitan area.

To put the process crudely: before the coming of the railways, income levels dictated a high physical concentration of the city population near workplaces. Railways added radial spokes



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to the city, each spoke linking upper income suburbs, and the railway terminal drawing to itself a concentration of activities. Up to the introduction of motor transport, the physical extension of the suburbs was limited by the range of horse or foot traffic. The car permitted high income dispersion from the suburb, filling in the wedges between the railway spokes. The truck — and the development of telephones, cheap dispersed power and services — permitted the space-extensive industry of the twentieth century to follow the upper income commuters beyond the city limits. The urban furniture was reshuffled, until now when the largest plants are often furthest from the city centre, but still dependent upon rapid access to it. The city proper is left to a vastly expanded complex of financial and business services with associated commercial and marketing operations, plus those too poor to commute.

The process is seen most clearly in the United States. Thus, the metropolitan areas of most rapid population growth were the central cities between 1900 and 1910; a five-mile ring round the central city between 1910 and 1920; a ring between five and ten miles round the city between 1920 and 1950; and thereafter, beyond a ten-mile radius.<sup>17</sup> The continued growth of many American cities has been achieved only through an extension of city boundaries, sometimes to cover an enormous area; Houston, for example, covers in its city area 503 square miles, and its suburbs are said to encompass 6,000 square miles. Where the cities cannot extend their boundaries — as, for example, in the north-east — severe financial problems have resulted, most vividly seen in the case of New York.<sup>18</sup>

In the LDCs, the process of dispersal is more contradictory. Quite often, the central city industrial growth which characterised nineteenth century cities continues, and dispersed metropolitani- sation of the twentieth century is grafted on top. In many MDC cities, inner city industry has virtually disappeared, but not in LDCs. It may be that, on the one hand, inner city textile mills continue to expand, drawing in to work a large mass of unskilled and low paid workers, many of them compelled by low incomes to walk to work from densely inhabited adjacent neighbourhoods. On the other hand, metal fabricating light industries and petro-chemical plants settle in an extending area beyond the city boundaries, drawing out daily a relatively skilled and highly

paid workforce on public or industrial transport. Simultaneously, white-collar workers commute to the city centre from dispersed suburbs. Sao Paulo, for example, has undergone a redistribution of activity. The municipal area population is growing at only half the rate of the surrounding *municipios* since new industry is expanding on the periphery of the city. Industrial employment in the city is growing at a slower pace than non-industrial employment.<sup>19</sup> In Greater Bombay, new industry has spread over a very large surrounding area, even extending to subsidiary colonies in Poona and Nasik. In the old city (the Island), the population is growing at a progressively slower rate in comparison to the suburbs, and in the case of some districts, is falling. However, in the Island districts where the textile industry is concentrated, the share of population is still rising quite rapidly.<sup>20</sup>

A declining city population is, contrary, to some opinion, a disaster. It produces only declining revenue. Furthermore, it may relieve none of the related problems — the people who leave do not necessarily leave house space within reach of the income level of the homeless, for example. Declining densities can be accompanied by deteriorating housing conditions. Nevertheless, dispersal is likely to continue, the faster the rate of economic growth. Without growth, however, the problems remain nearly as severe but without the means to overcome them.

### III

Economic growth, transmitted through increases in jobs and real incomes, underlies much of the growth in population and levels of migration. On the face of it, both population and migration increases ought to be matters of rejoicing, symptoms of success in the basic tasks of improving livelihood and of transforming the structure of backwardness. It would follow that the faster cities grow, the more people and activities are concentrated, the more rapidly the resources become available to raise living standards and to conquer poverty.

By historical standards, the successes of the last quarter of a century have been impressive. Of course, they have not at all eliminated the historical inheritance of colonial impoverishment. Furthermore, changes in the capital-output and capital-labour ratio have increasingly limited the number of jobs created in industry; the growth of labour

productivity has consistently eaten into the provision of new jobs. The incomes of the majority have remained quite inadequate for maintaining even an austere level of livelihood, and the problems here have been compounded by the consistent refusal of the established authorities to meet the full costs of economic growth in terms of housing, services and other items. Yet, with all the qualifications, more has been done in these years than the preceding decades of stagnation.

But the effort has been declining, and the successes achieved similarly reduced. In the 1950s, the maximum effort was made. In the 1960s, growth patterns of particular countries have become more diverse, job creation rates for many are falling, and (to take an example) the matching indices of the improvement in the average expectation of life at birth are also tending to fall. In the 1970s, stagnation, punctuated by wild fluctuations in the basic national parameters of economic growth (currency exchange rates, import prices) have precipitated a slow crisis. The structure of political power and the wild maldistribution of income between classes have become obdurate obstacles to the survival of the masses.

The anxiety engendered by such unpromising circumstances which threaten to reverse the advances of the immediate past is understandable. But the conversion of that anxiety into an hysterical search for scapegoats — the growth of the population (which invariably means the poor), in-migration or immigration, minorities whether defined by ethnic origin or religious persuasion — subordinates efforts to reach remedies to a simple defence of the *status quo*. Barbarism now compounds the effects of poverty. The mists of populist rhetoric and a common interest part to reveal an embattled ruling order with no greater ambition than the defence of its privileged position, regardless of cost. What begins as a simple economic function of the increasing degree of geographical concentration in contemporary capitalism — migration — becomes the social pretext for the defence of the system, for dividing the opposition and lending self-righteousness to the defenders. Of course, it is not a premeditated conspiracy; the attack on migrants and foreigners is rather a reflex of crisis, an instinctive reaction by the privileged under threat. An elaborated case of startling simplicity can be run up to give pseudo-scientific justification to the argument — too many



apes at the waterhole are impelled to growl and slaughter each other, the search for *Lebensraum* governs the tribal psyche (the definition of the tribe can be changed according to the problem).

In some cases, those who pride themselves on being reformers are sucked into the case. In West Germany, for example, a left-wing argument has been advanced against immigration and for the diversion of German capital to the countries which send immigrants, an argument which is half brother to the one in LDCs that industrial capital should be diverted to backward areas to "mop up" potential out-migration. In Germany, the argument is silly since the groups concerned are in no position to command German capital which goes where it wills in response to potential profits (and in current terms, profits are not high enough to induce capital to go to the countries which send Germany's immigrants); however, the Left can add a progressive gloss to German chauvinism and assist in banning immigration. In the case of LDCs, immigration to the cities can be banned (in general, it is tightly controlled in much of the Eastern Bloc, in China, South Africa and to a lesser extent in Indonesia), but the problems of inventing work in the rural areas remains. The costing of industrial output usually influences location decisions in favour of already developed areas whether it is public or private investment, so that decentralisation schemes are in general very ineffective, and thankfully so, given the high costs involved in inducing movement (a cost paid for by jobs foregone, by a higher degree of poverty than would otherwise be the case).<sup>21</sup>

There is no evidence of any "alternative model" of economic development, achieved either by good intentions or a change in the national system of government. On the contrary, the old "model" is increasingly powerfully impressed upon all participants in the world economy. The survival of new entrants to the world market requires a concentration of resources on a scale which is as close an approximation to the dominant powers as can be achieved.<sup>22</sup> No government can seriously opt out if it is to meet the minimum requirement of being able to develop its boundaries. Given the size of the existing concentrations — the core zones of the world economy — the prospects for the countries containing the mass of the LDC population were not promising

even when the world economy grew rapidly. To reach the threshold of a national economically independent unit in the present conditions of generalised stagnation (even if punctuated by sudden fluctuations) seems Utopian. The political structure of the world — national states — clashes against an economic order which is worldwide in scale. The dominant political drive — defence of national independence — collides both with the economic order (for greater concentration of labour and capital, employment and output) and the needs of the majority (a radical distribution of the product).

### Notes

[Much of the material in this paper is a summary of part of work undertaken under the auspices of the United Nations, to whom I make grateful acknowledgement. The opinions are entirely my own.]

- 1 "Health" World Bank Sector Policy Paper, Washington, March 1975, p 8.
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- 3 These economic zones do not coincide with the United Nations' "world population zones" — East Coast United States, southern coast of Japan, core of the European Common Market, Yangtze delta, Ganges delta, Jawa; cf "Growth of the World's Urban and Rural Population, 1920-2000", UN Population Studies No 44, UN, New York, 1969, p 4.
- 4 "Postwar demographic trends in Europe and the outlook until the year 2000", UN Economic and Social Council, Economic Commission for Europe (provisional, mimeo), June 1975 (ESA/P/AC 5/2).
- 5 Table I-5-5, "Survey of economic and social conditions in Africa 1974", UN Economic and Social Council, Economic Commission for Africa, December 10 1974, p 1-41 (E/CN 14/632/PART I).
- 6 *International Social Development Review*, No 4, Regional Socio-economic development, Department of Economic and Social Affairs, UN, New York, 1972, p 29.
- 7 Annex 13, 'Health', *op cit*, p 83.
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- 9 Luisa Danielli, 'Labour scarcities and labour redundancies in Europe by 1980: an experimental study', in Massimo Livi Bacchi (ed), "The demographic and social pattern of emigration from the Southern European Countries", Dipartimento Statistico-Matematico dell' Univer-

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- 12 Tables 2.8-2.13, Nigel Harris, "Planning the future of Bombay", Queen Elizabeth House, Oxford (mimeo), 1973, p 61-66.
- 13 C R Roll Jr and Kung-Chia Yeh, 'Balance in coastal and inland industrial development', in "China: A Reassessment of the Economy", a compendium of papers submitted to the Joint Economic Committee of the Congress of the United States, July 10, 1975, Washington, 1975, p 81.
- 14 *Economist Survey* January 25, 1975.
- 15 Migrants who stay in cities do seem to be better off on average. Not everyone is employed immediately, but a large fraction of migrants find jobs in a reasonably short period. Incomes are higher, even for the unskilled, and many who start out in relatively undesirable jobs manage to find better ones in time. Over time, in fact, there seems to be few employment-related differences between migrants and non-migrants of the same sex, age and educational level in metropolitan areas. Lorene Yap, "International Migration in LDCs: A survey of the literature", Urban Poverty Task Force, World Bank, November 1974.
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- 18 Explored in greater detail in my 'Two, Notes', *International Socialism* 85 (London), January 1976, pp 9-12.
- 19 Kalmann Schaefer, assisted by Cheywa R Spindel, "Urban development and employment in Sao Paulo", World Employment Programme Working Paper, International Labour Organisation, Geneva, June 1975.
- 20 Appendix I Table 1.1 Nigel Harris, "Planning" *op cit*.
- 21 The case against decentralisation is presented, *ibid*, Chapter 6, pp 129-149.
- 22 The argument is presented in 'Black Reformism: The Theory of Unequal Exchange', in Michael Kidron, "Capitalism and Theory", London, 1974, pp 95-167. On the case as it affects India and China, see 'The Economic Development of India and China', in my "India-China: Underdevelopment and Revolution", Delhi, 1974, pp 271-295.



# Prospects and Case for Employment of Women in Indian Cities

Heather Joshi

*Adult women are becoming an increasing proportion of India's urban population. For this reason alone, as well as likely increases in female participation rates, there is a growing female labour force and a need for accelerated recruitment of women to urban employment. Arguments against reserving jobs for men include the increasing burden of urban overhead expenditure if only males are economically active, raising urban family living standards and the encouragement of lower fertility, if women get some of the jobs.*

*Promotion of employment opportunities for women in the organised sector, as yet very low, should be part of a package of policies to absorb labour more remuneratively in rural areas and enhance the status of the urban unorganised sector, more of whose workers are already women.*

## I

### Need for Policies to Promote Employment in Urban India

ONE of the immediate and inescapable implications of population growth in India is that there is a large and growing population to be absorbed into gainful economic activity. No amount of family planning can remove the people who have already been born and who could be available for work for most of their adult lives. This proposition is true for India as a whole but also for urban India viewed separately.<sup>1</sup> Apart from changes in participation rates, the urban labour force grows from two sources — natural increase and net migration. Even if rural to urban migration was somehow stemmed with work found for the rural labour surplus outside the cities, urban India could still expect substantial labour force growth from their increase of the population which has already been born there. These city-born recruits to the urban labour force constitute the case for employment promotion in urban as well as rural areas. It is the contention of this note that a growing number of such recruits are going to be women and that the employment promotion for urban India must ensure that there is a greater proportionate increase in jobs for women than for men. This is true even if the rates of female labour force participation, currently very low, remained constant. There are many reasons to expect female labour force participation to increase. There is certainly little scope for women to withdraw further from the labour market to make way for men. The arguments against such an idea are set out in section V below.

## II

### Changes in Demographic Structure

In urban India as a whole and especially in the maturing big cities, the demographic trends are for there to be an increasing proportion of females in the population. Many Indian cities seem to be moving towards even numbers away from the traditional male majority. This arises firstly because natives of the cities are tending to grow faster than the cities, migrant population, and non-migrants have a more even sex structure than migrants. Secondly, there also seems to be less of a tendency for males to outnumber females amongst migrants from rural to urban areas. To caricature what is going on one could describe earlier stages of urban growth as consisting largely of a stream of male migrants who come to spend their adult lives working in the city. For much, if not all, of their sojourn they are not accompanied by wives or children. They migrate before they marry and even after marriage their wives may reside in the village. Their own childhood is spent in rural areas as, often, is that of their offspring. This sort of link with rural life also means that survivors retire to spend their old age in villages. At such a stage of urbanisation there are few women, children or old men living in towns. Once however women join the migration stream, and bear children in town, demographic forces snowball away from the adult-male-dominated model. The children born in towns are just about as likely to be female as male, links with rural areas are weakened and male workers are less likely to marry women who stay in villages or to retire there. As time goes by, the loss of females from the

urban population through out-migration at marriage to rural areas is weakened. Once a process of family formation in the cities starts, the natural increase of the city population accelerates as child-bearing age groups are over-represented amongst the migrant population which generates the natural increase. Once started the process gains a momentum of its own, helped by lower and falling mortality of children and mothers in urban areas. The break with rural society becomes more or less complete for the second-or-more-generation city-dwellers. The rural link for first generation migrants probably weakens as population pressure on the land means that fewer rural-urban migrants retain any rural property rights.

There has not been sufficient time to assemble detailed evidence that these hypotheses apply to most of the bigger Indian cities. Aggregated data suggest that they probably do and Table 1 presents the evidence in the case of one particular city, Bombay. The special Monograph No 1 of the Indian Census of 1971<sup>2</sup> presents clear evidence that migrants to urban India in 1971 were more likely to have been female than in 1961, and also that a major proportion of the intercensal increase was due to the increase in non-migrant urban population rather than the migrant population. The growth of urban India accelerated from 26 per cent for 1951-61 to 38 per cent between 1961 and 1971. The male population grew by 27 per cent and 37 per cent respectively, the acceleration in the growth of the female population was more marked, 25 per cent to 39 per cent.<sup>3</sup>

Table 1 shows that since 1951, the proportion of women in Bombay's po-



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TABLE 1: GREATER BOMBAY — SELECTED INDICATORS OF DEMOGRAPHIC EVOLUTION

	Population 000	Change over Previous Decade			Migrants in Total Population (Per Cent)	Males Aged 15-59 in Male Population (Per Cent)	Females Per Thousand Males		
		Total Growth	(Thousands) Natural Increase	Net Migration			Total Population	Migrants	Non- Migrants
1901	928				76.6	75.9	652	546	903
1911	1149	221	— 129	350	80.4	79.0	570	467	853
1921	1380	232	— 168	400	84.0	81.0	561	484	784
1931	1398	17	— 58	75	75.4	77.5	592	505	728
1941	1801	404	4	400	72.6	76.8	616	491	883
1951	2994	1193	243	950	72.1	74.6	603	507	883
1961	4152	1158	558	600	64.2	69.6	664	552	900
1971	5971	1819	1000*	819*	54.1*	na	716	652*	na

\* Denotes rough estimates, explained in source.

Source: Joshi and Joshi (1976) *op cit*, Table II.4 derived from K C Zachariah, "Migrants in Greater Bombay" (Pombay 1968) and Census of India, 1971.

population has been growing. It also shows the male surplus among the migrants weakening since the war; the growing contribution of natural increase to the city's growth and of the city-born to the population total.<sup>4</sup> In the past, males have tended to outnumber females in the urban population of working age, but the female population is catching up. Current and future additions to the urban population of working age may have as many females as males, if not more. Even holding participation rates constant, the proportion of the urban labour force that is female is likely to be increasing.

### III

#### Factors Affecting Female Labour Force Participation Rates

While this is not the place for an exhaustive analysis of the factors determining female labour force participation, their relative importance and future developments, it may be useful to set out a few reasons for doubting that adult female labour-force participation will drop much further.

Increased education, though it depresses the labour supply of people who are being students, seems to make women more inclined to join the labour market once they have attained at least secondary school level. The future proportion of secondary school graduates among the women of urban India seems unlikely to fall. Reduction in maternal and infant mortality and in completed family size is likely to increase the number of years when a woman is available on the labour market rather than engaged in child bearing. Later marriage and increased divorce could increase the numbers of women who needed to support them-

selves, increased life expectation of the older generation could increase the number of women who need to earn to support their parents. The pressures of inflation and taxation are already inducing middle class urban families to encourage more of their womenfolk to work. The general pressures for modernisation and international example would tend to raise India's very low rate of urban female work participation.

Against these factors must be set those which tend to keep female work participation low: lack of job opportunity and cultural resistance to changing accepted views of a woman's role being restricted to domestic activities. These factors certainly tend to reinforce one another when there is competition with men for too small a number of jobs. Certainly they vie, not with the pressures of enlightenment outlined above, but with the pressures of dire necessity, in keeping the ill-educated majority of women in the poor majority of families in or out of economic activity. Furthermore, it is possible for such families that fertility reduction could make female labour force participation more difficult. There would be fewer older siblings to share the burden of child-minding (as distinct from child bearing).

However strongly counteracting these downward pressures on participation rates may be, they are unlikely to shift the urban female labour force participation rate very much further downwards — it is already so low.

### IV

#### Opportunities for Female Employment

We have just seen that the proportion of women who are workers (the

female work participation rate) is low. It is a separate but not unconnected proposition that the proportion of workers who are women is low. The same phenomenon of restricted acceptance of women as earners produces it for the labour force in general. However, it also makes the proportion of female workplaces highly variable across occupations. Most occupations are a male preserve, a few jobs are regarded as suitable for women, and in some cases, unsuitable for men. A few departments in certain factories — reeling and winding in cotton mills, packing in the pharmaceutical industry — are almost entirely staffed by women. Telephonists and teachers are more likely to be women than many other workers. These particular variations are not always visible in figures of the level of aggregation given in Table 3, which shows the number of female workers per thousand male workers in broad industry groups, in urban India and Bombay, 1971. The Table also brings out that the areas of activity where women are most over-represented among workers are outside the 'organised' or modern sector. Where work is organised on a family basis, as in household manufacturing or in the

TABLE 2: WORK PARTICIPATION RATES BY EDUCATIONAL LEVEL, FEMALES URBAN INDIA, 1971

Educational Level	Per Cent
Illiterate	7
Literate (from 0 to middle ed level)	3
Matriculate	13
Degree/Diploma,	
Non-technical	22
Post Graduate	43
Degree/Diploma, Technical	62
Total	

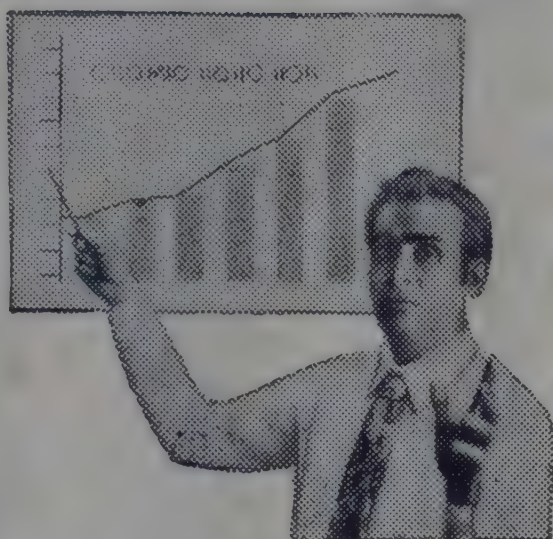
Source: Table B-III Part A (Provisional) Census of India 1971.



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TABLE 3: FEMALES PER THOUSAND MALE WORKERS, 1971

Industry	Urban India	Bombay	
		Census	Organised Sector
I Cultivators	92	202	—
II Agricultural Labourers	416		
III Livestock, etc	144		
IV Mining and Quarrying	120	92	65
V (a) Household Manufacturing	269	173	—
(b) Non-household Manufacturing	61	52	43
VI Construction	89	95	48
VII Trade and Commerce	44	57	113
VIII Transport and Communication	25	45	39
IX Other Services	187	282	200
Total Workers	115	96	83

Sources: Census of India, 1971, Table B-III part A (Provisional) and Joshi and Joshi, *op cit*, Appendix III. 3, figures for organised sector adjusted for comparability with census.

agricultural/livestock sectors, females are more likely to be among the economically active than elsewhere — albeit in a menial capacity. Females are over-represented in the service sector of both the organised and the unorganised sector. In the former they are largely accounted for by teachers, medical personnel, and, to a lesser extent, civil servants; outside the organised sector, female workers are largely domestic servants.

Table 3 shows that the 'organised sector' (the public sector and establishments employing more, in Bombay, than 25) was even less likely to employ women than was the workforce as a whole.

Table 4 shows that this pattern is repeated in many other large cities. The Table is restricted to the twelve-districts with at least half of the population in urban areas. In only three of them is the proportion of women in organised employment higher than that of the urban workforce as a whole<sup>6</sup> — Chandigarh, Delhi and Calcutta. In the first two, northern cities with a predominantly administrative function, the demand for female workers in the organised service sector seems to be relatively stronger than the absorption of women in the traditional sector, which is low in this part of the country; the figures for Calcutta are suspect, seriously affected by under-reporting at this time. Although the figures for all-India are shown at the bottom of Table 4, we have concentrated on the urbanised districts as organised employment in other districts is more likely to be in rural areas. Plantation employment, which accounts for a disproportionate amount of female organised employment, is probably responsible

for raising the national average sex ratio in organised employment. In tea-growing districts like Nilgiri and Darjeeling, there are nearly as many female workers in the organised sector as males. Plantation work does not however add to employment opportunities for women in the cities.

This section has revealed that whereas females are somewhat outnumbered in the urban population, by a factor of less than two, they are heavily outnumbered amongst urban workers, by a factor of about ten to one. In the organised sector in big cities, the female minority is often even smaller. To keep pace with growing female labour supply, these ratios will have to change rapidly. As the urban population moves towards equal numbers and as female participation rates rise, these sex ratios in employment will also have to rise —

from about 100 to, eventually, something more like 500. (The latter is on the assumption that participation rates move so that the average urban female spends half her adult life in the labour force, which is lower than in the West, not to mention USSR or China). To achieve this, female employment will have to grow considerably faster than male employment. To the extent that it fails to happen, there will be explosive growth in the already huge backlog of registered female job-seekers.<sup>7</sup>

I have not been able to make proper demographic projections, nor were data on the current progress of organised sector employment available to me, but I have done the following back-of-the-envelope illustrative calculations. They indicate that the current magnitude of jobs needed for women is not too high to be contemplated.

Suppose natural increase adds 15 million males and 15 million females to the urban population during the current decade. In the absence of any net migration this would mean that the female population increased by about 30 per cent, the male population by just over 25 per cent and the urban sex ratio to 888. In 1971, the census recorded 28.5 million male urban workers and 3.7 million female workers. Were the crude participation rates to remain constant, there would be an increase of over 7 million male workers and just over 1 million female workers. For reasons of age structure alone, the male crude participation rate would be somewhat

TABLE 4: SEX RATIOS IN POPULATION AND EMPLOYMENT, SELECTED URBAN DISTRICTS, 1971

	Urban Population as Per Cent of District Population	Reported Organised Workers of Census Non-cultivating Workers	Females per 1000 Males		
			Urban Pop	Urban Non-cultivating Workers	Organised Employment
Chandigarh	91	45	755	96	120
Delhi	90	48	798	80	107
Lucknow	51	57	810	65	53
Gwalior	52	41	847	85	73
Indore	63	33	857	104	103
Calcutta	100	31	638	56	63
Ahmedabad	64	49	840	84	86
Greater Bombay	100	51	717	105	86
Nagpur	54	43	900	166	89
Hyderabad	66	37	927	186	84
Bangalore	56	38	880	148	104
Madras	100	45	902	123	94
All-India	20	31	859	116	122

Source: Census of India, 1971 Paper 1, and Directorate General of Employment and Training, Delhi.



lower in 1981, and the female rate somewhat higher. If we also take into account the larger proportional backlog of unemployed females and other likely increases in desired age-specific female participation rates, we might amend the estimate of extra 'jobs' to 6 million for males and 2 million for females by 1981. This would bring the sex ratio among workers to 165. To bring the urban sex ratio up to 200 by 1981, with 6 million extra male workers, the additional female jobs would have to be about 3 million.

## V

### Case against Reserving Urban Jobs for Men

It often seems to be argued that where jobs are scarce, it is better to employ men before women. These arguments are however answerable if not fallacious. Some of the arguments for employing women as well as men, or indeed instead of men, are listed below.<sup>8</sup>

(a) The first set of arguments have already been set out — the growth of the female labour force already in urban areas. This arises from underlying demographic developments in the age-sex structure of Indian cities, changes in fertility patterns, upward pressure on labour-force participation, and the lack of scope for it to fall.

(b) It can be argued that urban in-migration needs to be curbed so that the cities' economies can catch up with providing infrastructure and jobs to those already there. The need for employment and income by the rural masses should largely be met by employment-oriented development policies outside the cities.<sup>9</sup> Improving opportunities for men is more likely to attract in-migration than improving opportunities for women, a vast reserve of whom is already in the urban areas.

(c) Ensuring employment growth for urban women at the same time as the male population remained stationary would have the following advantages. A given urban labour force would require less investment in urban infrastructure and services than if only men worked. In the latter case, inactive population per worker could be about three times as high. Urban family living standards are not dependent on one sole earner so that living standards can be protected and poverty alleviated, if there are opportunities

for women to earn. It is not necessary to guarantee wage levels above the internationally competitive level to ensure that one worker can support a whole family. Competitive export industries themselves create jobs for men as well as women.

(d) It is a waste of investment in education and training that has already taken place not to improve girls' access to jobs where the skills could be put to some use.

(e) It would greatly enhance the attempts of population policy to promote later marriage and postponement of births if girls in their teens and early twenties had more acceptable and remunerative alternatives to child bearing.

## VI

### How Can This Be Done?

This note cannot go into all the necessary considerations of the issues of how female employment promotion is best achieved. There is, for example, a delicate and knotty issue of whether protective legislation on matters like maternity leave and employer provision of creches may not be self-defeating. In so far as employment in the organised sector goes, there would seem to be a need for more relaxed attitudes from families and employers about employment for women. Exhortation may help and the government could give a more positive lead by deliberately boosting female employment in the public sector. There should be no discrimination against female recruits and employment conditions should make it possible for mothers to work part-time (e.g. sharing jobs with other women) or return to work after a break. For the majority of working women at present outside the organised sector in, for example, handicraft sectors, improved markets, credit and inputs for their activities would improve prospects and levels of earnings.

## VII

### Conclusion

It is not my intention to force upon Indians an alien conception of women's economic role which happens to have been fashionable in International Women's Year. I have tried to point out that even to maintain existing levels of female participation in the urban economy, employment of women will

have to run to stand still. Furthermore, there would seem to be plenty of reasons for women and men in India to need and to welcome improved earning opportunities for women. I hope they will demand them.

## Notes

- 1 For more detailed definitions of terms used in this section and a fuller discussion of the issues raised see H Joshi and V Joshi, "Surplus Labour and The City", OUP Delhi, 1976, Chapters 1 and 6.
- 2 G K Mehrota, "Birth-Place Migration in India", Census of India, 1971 Series 1 — India, Special Monograph No 1, New Delhi, 1974.
- 3 These calculations are regrettably based on rather crude data, unadjusted for boundary changes and provisional totals for 1971 as follows:

POPULATION OF URBAN INDIA, 1951-71  
(000)

	Males	Females
1951	33,578	28,866
1961	42,789	36,147
1971	58,523	50,264

The overall sex ratio (females per thousand males) dropped in 1961 and rose back to its 1951 level in 1971 at 859. This overall ratio hides a great diversity. Broadly speaking, at least in north India, the bigger cities have proportionally fewer women, but in southern India sex ratios are more even in cities of all sizes. Part of the increase in female urban India may be due to a compositional effect of faster growth in the cities which start off with a bigger female proportion. This and many other hypotheses are not explored in any greater depth here.

- 4 The female deficit among non-migrants is probably due to out-migration at marriage. As long as more brides than bridegrooms move residence at marriage, this phenomenon will create female deficits among the remaining native residents of any specific area.
- 5 This applied in all industrial divisions except trade, where the organised sector was relatively small, swamped by a big unorganised retail sector and where the relative growth of female organised employment (commerce and banking) had been particularly high.
- 6 Cultivators and agricultural labourers have been excluded from the urban work force for this purpose. There is no organised employment in this sector.
- 7 See Joshi and Joshi, *op cit*, p 66.
- 8 Many of these arguments are expanded in greater detail by Ester Boserup in "Women's Role in Economic Development", London, 1969, which is highly recommended reading.
- 9 See Joshi and Joshi, *op cit*, Ch 6.



# 6 Per Cent State Government Loans, 1986

State	Amount of Loan (In crores of Rupees)
1. Andhra Pradesh	11.50
2. Assam	7.50
3. Bihar	14.00
4. Gujarat	17.50
5. Karnataka	17.00
6. Kerala	9.75
7. Madhya Pradesh	8.75
8. Maharashtra	13.50
9. Orissa	14.00
10. Rajasthan	21.00
11. Tamil Nadu	13.50
12. Uttar Pradesh	10.00
13. West Bengal	13.50

All the above loans will be issued at Rs. 99.00 per cent and will open for subscriptions on Tuesday, 24th August 1976 and close on Saturday, 28th August 1976 or earlier without notice as soon as subscriptions approximate to the amount of each issue. All the State Governments reserve their right to retain subscriptions upto ten per cent in excess of the notified amounts.

The loans will be redeemable at par after 10 years i.e. on 24th August 1986 and interest will be paid half-yearly on 24th February and 24th August each year. Interest in respect of all loans will be liable to tax under the Income-tax Act 1961. Interest on Government securities along with income in the form of interest or dividends on other approved investments will be exempt from Income-tax subject to a limit of Rs. 3,000/- per annum and subject to other provisions of Section 80L of the Income-tax Act, 1961.

The value of investments in the Loans now issued together with the value of other previous investments in Government securities and the other investments specified in Section 5 of the Wealth Tax Act, 1957 will also be exempt from the Wealth Tax upto Rs. 1,50,000/-.

Subscriptions may be in the form of CASH/CHEQUE.

Securities of the following loans will also be accepted AT PAR for conversion into the new loans of the respective State Governments:-

Name of the loan tendered for conversion	Name of the new loan issuable
1. 4½% Andhra Pradesh State Development Loan, 1976.	6% Andhra Pradesh State Development Loan, 1986.
2. 4½% Assam Loan, 1976.	6% Assam Loan, 1986.
3. 4½% Bihar State Development Loan, 1976.	6% Bihar State Development, Loan, 1986.
4. 4½% Gujarat State Development Loan, 1976.	6% Gujarat State Development Loan, 1986.
5. 4½% Kerala State Development Loan, 1976.	6% Kerala State Development Loan, 1986.

6. 4½% Madhya Pradesh State Development Loan, 1976.	6% Madhya Pradesh State Development Loan, 1986.
7. 4½% Madras Loan, 1976.	6% Tamil Nadu Loan, 1986.
8. 4½% Maharashtra State Development Loan, 1976.	6% Maharashtra State Development Loan, 1986.
9. 4½% Mysore State Development Loan, 1976.	6% Karnataka State Development Loan, 1986.
10. 4½% Orissa Government Loan, 1976.	6% Orissa Government Loan, 1986.
11. 4½% Rajasthan State Development Loan, 1976.	6% Rajasthan State Development Loan, 1986.
12. 4½% Uttar Pradesh State Development Loan, 1976.	6% Uttar Pradesh State Development Loan, 1986.
13. 4½% West Bengal Loan, 1976.	6% West Bengal Loan, 1986.

If the cash value of the securities tendered for conversion is not an exact multiple of the issue price per cent of the new loan, the tenderer will receive in cash at the time of issue of the new securities the amount by which the value of the securities tendered exceeds the nearest lower multiple of the issue price. Interest for the half year ending 23rd August 1976 on the securities accepted for conversion, except that of Kerala, will be paid at the rate of 4½% per annum at the time of issue of new securities. As 4½% Kerala State Development Loan 1976 will be maturing on 25th August 1976, interest on securities of this loan accepted for conversion will be paid at 4½% per annum upto and inclusive of 23rd August 1976 at the time of issue of new securities.

Applications for all the loans will be received at the offices of the Reserve Bank of India at Ahmedabad, Bangalore, Bombay (Fort and Byculla), Calcutta, Hyderabad, Kanpur, Madras, Nagpur, New Delhi and Patna and the State Bank of Bikaner and Jaipur at Jaipur.

Applications will also be received at other places within the respective States as follows:

- Branches of the Subsidiary Banks of the State Bank of India conducting Govern-



ment treasury work except at Hyderabad; and

- (ii) Branches of the State Bank of India at places where there is no branch of its Subsidiary Banks conducting Government treasury work.

Applications for Kerala State Development Loan will also be received at Treasuries and Sub-treasuries in the State of Kerala at places where there is no branch of the State Bank of India or its subsidiaries conducting Government treasury work

Securities will be issued in the form of Promissory Notes or Stock Certificates. The advantages of investing in the form of Stock Certificates are as under:-

- (i) It is safer than a Government Promissory Note as the name of the holder is registered in the books of the Public Debt Office.
- (ii) The Stock Certificate will be sent to the applicant direct by registered post by the Public Debt Office.
- (iii) The half yearly interest will be remitted to the holder direct by an interest warrant drawn at par on any Treasury or State Bank branch stipulated by the holder. If the holder so desires, the interest will be re-

mitted by Money Order after deducting the Commission charges.

- (iv) If the holder wishes to sell his securities he can do so by signing the transfer form printed on the back of the Certificates in the manner prescribed therein.
- (v) Government Promissory Notes in exchange for the Stock Certificate can be obtained by applying to the Public Debt Office and on payment of a nominal fee for each new note required.

Copies of the Notifications and Application Forms may be obtained from any of the Receiving Offices mentioned above.

In the event of over-subscription to the loan applied for, applicants tendering applications at the offices of the Reserve Bank of India at Ahmedabad, Bangalore, Bombay (Fort and Byculla), Calcutta, Hyderabad, Kanpur, Madras, Nagpur, New Delhi and Patna will be given the option of transferring their cash refunds to any other State Government loan which may still be open for subscription. To avail themselves of this facility, applicants should complete the "Special Option Form", copies of which can be obtained at any of the offices of the Reserve Bank of India mentioned above and tender the form along with their applications.

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# International Trade and Economic Activity in a Labour Surplus Economy

M K Rakshit

*Analysis of the effects of foreign trade on a labour surplus economy must run in terms of its impact on the food surplus available to the non-agricultural sector. The ultimate damage is done when 'grains' enter as an export item for supporting imports (that add nothing to the productive capacity of the food sector). However, so long as the surplus is there, activities in the non-agricultural sector are supported, though their forms change over time. Handicrafts are gradually replaced by the services: services for the repair of clocks, motor cars, or other durable consumer goods, hotel, bar and restaurant services, English medium schools and bands for playing English music then gradually come into being. The important point to note here is that deindustrialisation and commercialisation of agriculture are but manifestations of the same process.*

*Probably the most dramatic consequence of the process is the famine-proneness of the economy as better quality and irrigated land is diverted to the export-sector and food production is left at the mercy of the weather gods. In a year of good harvest, employment in the non-agricultural sector is supported through the food surplus. But in a year of poor harvest the incidence of unemployment and starvation is heaviest in the non-agricultural sector of the economy.*

"The objects of oriental traffic were splendid and trifling; silk a pound of which was esteemed not inferior in value to a pound of gold; precious stones ... and a variety of aromatics ... As the natives of Arabia and India were contented with the productions and manufactures of their own country, silver on the side of the Romans, was the principal, if not the only instrument of commerce. It was a complaint worthy of the gravity of the Senate, that in the purchase of female ornaments, the wealth of the state was irrevocably given away to foreign and distant nations. The annual loss is computed by a writer of an inquisitive but censorious temper at upwards of eight hundred thousand pound sterlings ... Such was the style of discontent brooding over the prospect of approaching poverty."

—E Gibbon, "The Decline and Fall of the Roman Empire", Vol I, pp 40-50 (The Modern Library: New York).

WHAT are the determinants of the level of economic activity in a labour-surplus primarily agricultural economy? Is a rise in export demand or an improvement in the terms of trade a boon to the primary producing countries? What were the economic causes of the phenomenon popularly known as "de-industrialisation"? The present paper aims at developing a model for providing answers to such questions.

## I

Consider an economy where the real wage rate,  $w$ , is fixed in terms of 'corn', and the non-agricultural sector consists of handicrafts, services, etc, the production of which is governed solely by demand. The behaviour of such an economy when exposed to the forces of international trade can be studied in a number of ways. The conventional ana-

lysis runs in terms of the shift of the consumption possibility frontier so that there are "gains" from trade in a certain sense. The basic difficulty of such an approach is that not only does it pay scant attention to the long-term development of the economy, but also the losers and the gainers are lumped together, and no account is taken of the special features of these economies. A satisfactory treatment of the subject must analyse the following aspects of the problem.

First, there is general agreement that international trade has profound influence on the economy's saving behaviour, though there is violent disagreement as to whether it is the "demonstration" or the "aspiration" effect that is more dominant. Second, the pattern of investment will be significantly changed consequent upon the opening up of trade. Third, one of the most important ways in which international trade affects the development of a backward economy is through the introduction of new techniques, and especially of new products in the production basket.

When concerned with the short-run behaviour of the economy we play down the first two aspects and concentrate on the third. With transport hazardous and costly, international trade, of necessity, is confined to the articles of luxury consumption and bullion. Improvement in transport facilitated the production and export of primary products and the import of machine made goods.<sup>1</sup>

## II

For a primarily agricultural econo-

my such a development means that there are now two parts of the agricultural sector: one, producing export goods (X), and the other producing food (F) exclusively for the home market. X and F then become substitutes in the sphere of production. Such substitution can take a variety of forms. Production of cash crops like indigo, jute, opium, cotton, sugarcane, tea or coffee absorbs land and manure; construction of railways (which facilitated international trade enormously) and the railway fuel requirement caused the destruction of trees yielding food; cowdung was used as fuel because of shortage of firewood and production of bricks.

Besides X and F, the other three goods in our model are labour (N), imports (M), and the non-agricultural product (E). We express the price of everything in terms of corn; a unit of non-agricultural product is so defined that its price is 1.<sup>2</sup> The producers of X and the buyers of imported goods are confronted with the prices  $P_x$  and  $P_m$  respectively. Without sacrificing any essential features of our conclusions we assume that the peasants and the workers consume only food, and the landlords (or those who enjoy a share of the surplus) buy only non-agricultural products and imported goods.<sup>3</sup>

Let  $N^f$  and  $N^x$  denote employment in the production of food and of export goods respectively. Production and employment in the food and the export sectors depend upon  $w$  and  $P_x$ : the higher the  $P_x$ , the higher will be the levels of X and  $N^x$ , and the smaller the levels of F and  $N^f$ ; the aggregate surplus (S) in the agricultural sector



(consisting of both food and export goods) will be larger for a higher  $P_X$ .

$$(1) F = F(w, P_X)$$

$$F_1 < 0, \quad F_2 < 0$$

$$(2) N^f = N^f(w, P_X)$$

$$N_1^f < 0, \quad N_2^f < 0$$

$$(3) X = X(w, P_X)$$

$$X_1 < 0, \quad X_2 > 0$$

$$(4) N^x = N^x(w, P_X)$$

$$N_1^x < 0, \quad N_2^x > 0$$

$$(5) S = F + P_X \cdot X - w(N^f + N^x)$$

The demand for imports (and  $E$ ) will then depend upon  $S$  and  $P_m$  subject to the condition that the total expenditure on  $M$  plus  $E$  must equal  $S$ :

$$(6) M = M(S, P_m)$$

$$M_1 > 0, \quad M_2 < 0$$

$$(7) P_m \cdot M + E = S.$$

The next relation of the system can be looked upon either as the balance equation of the food market or as the balance of trade equilibrium condition:

$$(8) F - w(N^f + N^x) = S - P_m \cdot M$$

where the left hand side indicates the food availability to the non-agricultural sector and the right hand side the demand for food in the non-agricultural sector.<sup>4</sup> It may be easily noted from (7) and (8) that the level of activity in the non-agricultural sector of such an economy is completely determined by the marketable surplus of food to the non-agricultural sector, as given by the left hand side of (8).

Given the price of exports in terms of food,  $F$ ,  $X$ ,  $N^f$  and  $N^x$ , and hence the production of non-agricultural goods in the economy are determined. A rise in  $P_X$  raises  $X$ ,  $N^x$  and  $S$ , but reduces the levels of  $F$ ,  $N^f$  and  $E$ . A plausible relationship between  $P_X$  and  $E$  is shown in the left hand quadrant of Fig 2 where  $OB$  is the level of  $E$  without any production of exports (or strictly, the maximum possible level of  $E$ , because upto a point  $X$  and  $F$  may not be substitutes), and  $OA$  is the export price at which the surplus in the food sector is just sufficient to maintain workers in the export sector.

For equilibrium in the food market it is required that the expenditure on

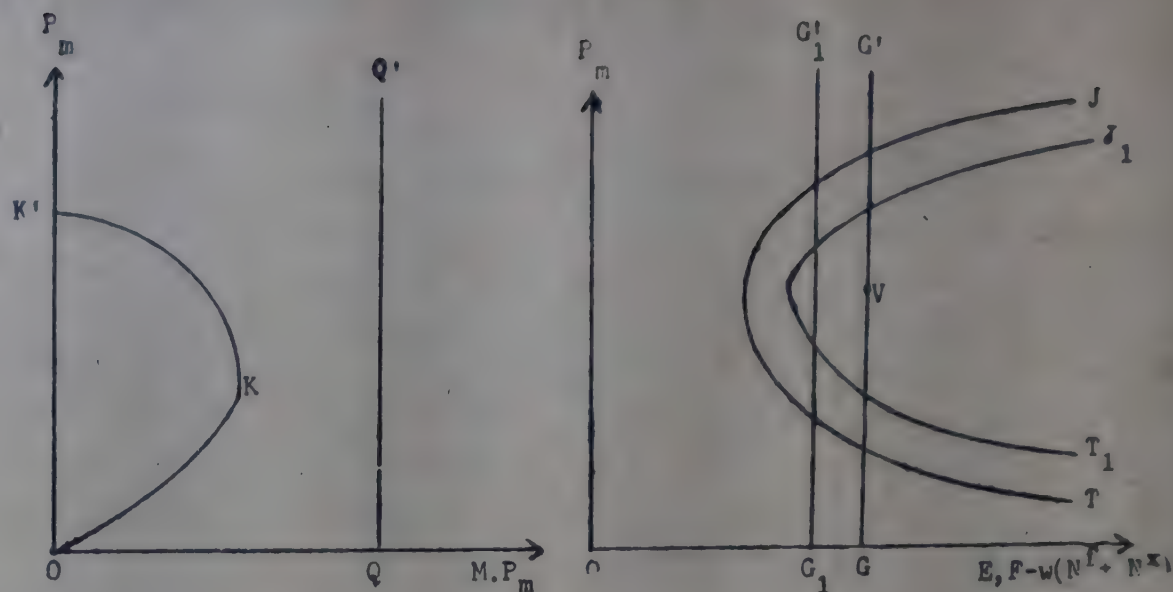
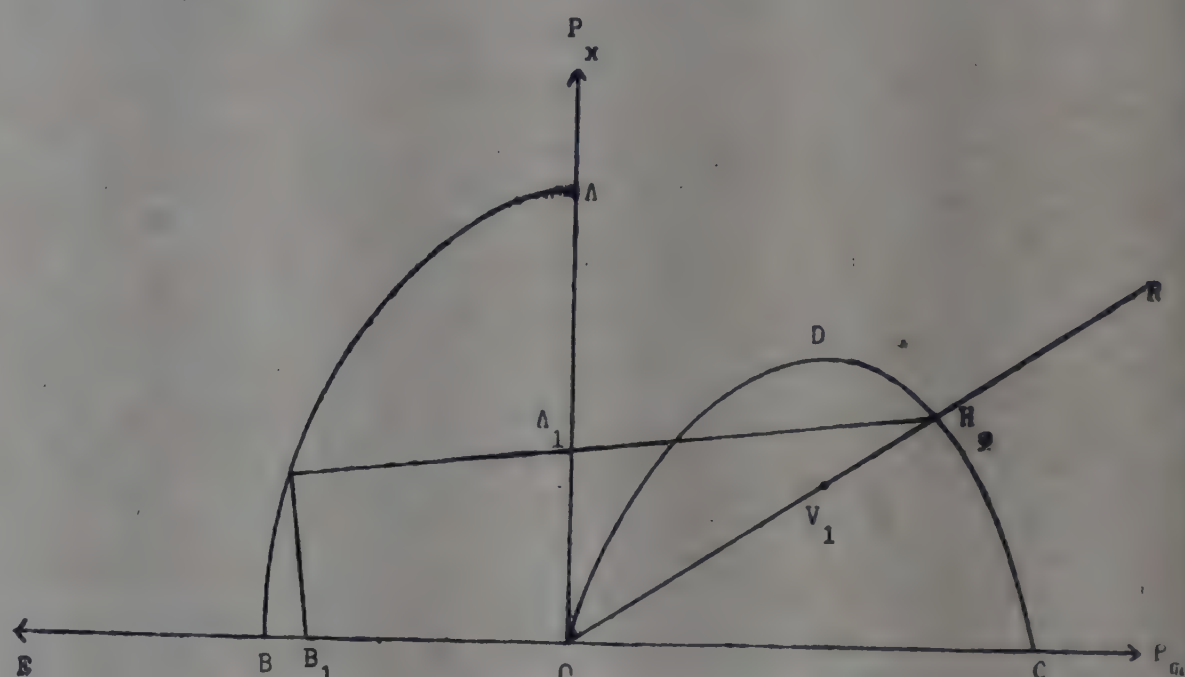


FIGURE 2



food,  $S - P_m \cdot M$ , must equal the marketable surplus in the agricultural sector. Given  $P_X$ , the food surplus as also the total surplus (which is nothing but the food surplus plus the value of exports) are determined;  $P_m$  then must be such as to fix import demand at the level at which (8) is satisfied. In Fig 1 let  $OQ$  be the surplus ( $S$ ) and  $OG$  the food surplus in the agricultural sector. The expenditure on  $M$  with respect to a fall in  $P_m$  will rise, remain constant or fall according as

$$-M_2 \frac{P_m}{M} \gtrless 1.$$

The elasticity of demand is in general higher at higher and lower at lower values of  $P_m$ <sup>5</sup> so that we take  $K'KO$  to be the curve showing total expenditure on imports. Corresponding to  $K'KO$  we obtain the demand for  $E$ ,  $JK$ , as the lateral difference between  $QQ'$  and  $OKK'$ .  $JT$  together with the food supply ( $OG$ ) to the non-agricultural sector yields two values of  $P_m$  consistent with the food

market or the balance of trade equilibrium in the system.

For higher value of  $P_X$ ,  $S$  will be larger and the food supply to the  $E$ -sector smaller so that  $GG'$  shifts to the left and  $JT$  to the right.<sup>6</sup> Thus as  $P_X$  rises the two market clearing prices of imports move closer until  $JT$  and  $GG'$  are tangential. The relationship between  $P_X$  and  $P_m$  is shown by  $ODC$  in Fig 2 with  $DC$  corresponding to the elastic and  $OD$  the inelastic parts of the demand for imports.<sup>7</sup>

Since  $F$  and  $E$  are not traded internationally their prices prevailing in other countries are of no relevance to us. For equilibrium of the traders, the price ratio of  $X$  and  $M$  prevailing in the domestic market should conform to their international price ratio (with allowance for transport costs, etc) — otherwise traders can make more profits. Hence we close the system with the relation

$$(9) \frac{P_X}{P_m} = \alpha$$



where  $\alpha$  is the domestic price-ratio of K and M, as internationally determined.<sup>8</sup> In Fig 2  $\alpha$  is indicated by the slope of OR corresponding to which the equilibrium values of  $P_x$ ,  $P_m$  and E are given by OA,  $A_1$ ,  $H_1$  and OB, respectively.<sup>9</sup>

### III

The tool of analysis developed here is extremely simple, but does not, we submit, lack cutting edges. Even without going into the corresponding formal model for long-term development,<sup>10</sup> it is possible to throw light on the economic aspects of the predominant forms of trade India was engaged in during the different phases of her history.

Consider the (Imperial) Roman trade on which Gibbon quotes with approval from Pliny or trade during the Mughal period. International trade was then confined to the products of the non-agricultural sector. In terms of our model this implies that exports leave the food surplus (which is now the same as the value of S)

$$S = F - wN^f$$

unaffected. Given S and  $P_m$  (since the price of E is fixed in terms of corn) imports adjust so as to maintain equilibrium in the balance of trade; however, the level of economic activity in the non-agricultural sector remains unchanged. The effect of international trade is mainly confined to a change in the composition of E — a part of E being now consumed by the foreign instead of the domestic buyers. Indeed, if the demonstration effect induces the landlords<sup>11</sup> to squeeze more surplus, the level of E will be boosted — and economists and historians unacquainted with our framework may wrongly attribute this boom to the direct influence of international trade. The long-run consequences of such trade depend upon the effects on saving and the pattern of investment, and these we shall briefly note presently.

Our primary concern, however, is with the pattern of trade that has emerged since the industrial revolution between Western and primary producing countries like India. Initially because of high transport cost the price ray OR (Fig 2) faced by the underdeveloped country is lower. Reduction in transport costs, growth in the foreign demand for primary products, or cheapening of manufactured goods lead to a shift of OR in an anticlockwise manner — so that opening up of trade and improve-

ments in the terms of trade, though adding to the gains of the landlords (and capitalists) will have an adverse effect on the levels of employment and economic activity in the non-agricultural sector.<sup>12</sup> So far as the short-run effects are concerned, the damage done to the economy by the foreign traders<sup>13</sup> (in competing the handicrafts out through means fair and foul) was small compared with that inflicted by the foreign capitalists and the enlightened landlords like Begum Sumroo who instead of dissipating zamindari resources virtually at the point of their accumulation,

"made skilful employment of such income" and "a system of tied loans from the revenues controlled for the Begum the production of the most lucrative crops of cotton and sugarcane".<sup>14</sup>

The long-run substitution (relatively, if not absolutely) directly effected in the sphere of production in the agricultural sector by the traders was marginal,<sup>15</sup> substitution possibilities were widened through investment in railways, irrigation, etc.

The surplus generated in the economy because of international trade was larger, to be sure. Conventional wisdom would then indicate the likelihood of an export propelled growth<sup>16</sup> supported by the twin forces of the higher rate of return on investment and the "aspiration effect". However, one should not make much of the "aspiration effect". Its working depends on the existence of somewhat peculiar time preference, and what is more important, it should be inoperative in a country where the surplus is appropriated in a few hands. There are on the other hand grounds for believing that it was the "demonstration effect" which proved decisive and caused a decline in investment in the food sector.<sup>17</sup> The familiar economic forces were also at play in directly effecting the diversion of investment from the food to the export sector. New techniques and products requiring substantial investment were introduced in the export sector (often directly by the foreigners).<sup>18</sup> In an underdeveloped economy forces were also at play in directly effecting markets are yet imperfect, export crops are more liquid (remember, they are called cash crops) so that their production is preferred, especially when the producers (both indigenous and foreign) are interested in buying imported goods.<sup>19</sup>

The conclusion one can draw from our model is fairly simple. Analysis of the effects of foreign trade on a labour surplus economy must run in terms of

its impact on the food surplus available to the non-agricultural sector. The ultimate damage is done when 'grains' enter<sup>20</sup> as an export item for supporting imports (that add nothing to the productive capacity of the food sector). However, so long as the surplus is there, activities in the non-agricultural sector are supported, though their forms change over time. Handicrafts are gradually replaced by the services: services for the repair of clocks, motor cars, or other durable consumer goods, hotel, bar and restaurant services, English medium schools and bands for playing English music then gradually come into being. The important point to note here is that deindustrialisation and commercialisation of agriculture are but manifestations of the same process.

Probably the most dramatic consequence of the process is the famine proneness<sup>21</sup> of the economy as better quality and irrigated land is diverted to the export-sector<sup>22</sup> and food production is left at the mercy of the weather gods. In a year of good harvest, employment in the non-agricultural sector is supported through the food surplus. But in a year of poor harvest incidence of unemployment and starvation should be heaviest in the non-agricultural sector of the economy.<sup>23</sup>

### Notes

[The author is indebted to Nabendu Sen for valuable suggestions and comments.]

- 1 Our model, however, will be general enough to throw light on the phenomenon noted by Gibbon.
- 2 Remember, the production of E is governed by demand so that the price of E in terms of F is given so long as w is constant.
- 3 We neglect investment by the landlords, etc, in the form of addition to foodstock.
- 4 Substituting the value of S from (5) into (8) it may be seen that (8) reduces to the balances of trade equilibrium condition:  
(8')  $P_x \cdot X = P_m \cdot M$
- 5 This is obvious if there be a finite price at which demand is driven down to zero and a finite demand at zero price.
- 6 So long as E is non-inferior.
- 7 It may be noted that the maximum price consistent with the balance of trade equilibrium is less than the price at which the food supply to the E-sector is reduced to zero.
- 8 One may easily give up the small country assumption, or bring in imperfections of competition without any difficulty.
- 9 A point like  $V_1$  in Fig 2 corresponds to a point like V in Fig 1 and indicates excess demand for imports over exports, measured in



terms of corn. This will raise the corn price of both exports and imports, as the landlords (buyers of M) try to buy more of M in exchange for their surplus — i.e., there is a movement from  $V_1$  towards  $H_1$  (Fig 2).

- 10 Which, we hope, will form part of a larger study.
- 11 Or the princes and the prelates in the Roman days.
- 12 Only in the inelastic phase of the demand curve for imports (i.e., along OD in Fig 2) would the interests of the two groups — landlords and workers — appear to coincide in a limited sense. However, introduction of new importables in the production set of the developed countries would make such a phase effectively unapproachable.
- 13 In fact very often foreign traders combined monopoly with monopsony powers. This in our model implies a lowering of the price line OR (Fig 2) so that we may appear as apologists of foreign monopoly traders (though not the producers) since we conclude that their activities went in favour of the workers, though not the landlords. The case of indigo production in Bengal might appear as an exception, as it is believed to have been forced into the indigenous production basket by the foreign traders. However, had the domestic landlords had access to foreign markets it would have been profitable for them to switch over from rice to indigo cultivation (and the foreign traders did set up plantations when they could legally acquire land). My point is that the indigo planters did an unintended service to the workers in so far as they prevented local landlords from switching over to indigo production.
- 14 E Whitcombe, "Agrarian Conditions in Northern India", Vol 1, p 6. (Thomson Press India, New Delhi, 1971.)
- 15 What about the forced trade and the direct plunder which constituted the so-called 'drain'? From our point of view their importance is secondary and indirect: in our framework they acquire significance only in disrupting agricultural production directly and indirectly (through a decline in investment in the agricultural sector). Incidentally, the unrequited part of trade can be easily accommodated into our model by considering the import demand of a part of S (the part appropriated by the foreigners) to have unit-elasticity with respect to  $P_m$ .
- 16 The blame for the failure of growth to materialise would be squarely laid at the doors of low income and price elasticities of demand for primary products.
- 17 So long as the landlords resided in the villages the traditional obli-

tions of maintaining law and order, digging ponds, repairing canals, etc., were discharged (even though the duties were not made obligatory under the new laws): such expenditure added to their status and prestige. However, migration of landlords to cities and the consequent change in their preference pattern, (i.e., a reduction in the weights they attached to their status in villages) put an effective stop to such form of investment.

- 18 When we talk of the flow of foreign investment, we should remember that it has also an indigenous component which may be diverted from other sectors.
- 19 For the foreigners it could be remittances.

- 20 As they did in the later half of the 19th century.
- 21 Less dramatic but no less tragic is the secular erosion of the standard of living of the masses. The unemployed (open or disguised) are prevented from starvation death by the extended joint-family system — but malnutrition and epidemics take their due toll.
- 22 Bhatia supports the view that opium production was directly responsible for famines in Rajputana. See B M Bhatia, "Famines in India 1860 1965", pp 33-4 (Asia Publishing House, Bombay, 1967).
- 23 The thesis is supported by the Indian experience that to famine relief camps it is the artisans who come first, followed by landless labourers and small farmers:

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# Some Aspects of Foreign Trade of India and China

Ranjit Sau

This essay began as an attempt to see how far the price differentials charged by various countries engaged in trade with India can be ascertained from the published data. The issue is important in view of the recent complaints about the alleged practice of overpricing.

Meanwhile, we could also locate a source of information on the foreign trade of China. The formula for relative price index that was constructed for India was applied also to China.

UNEQUAL exchange is a centuries-old phenomenon. At the turn of the 15th century the outward thrust of European mercantilism began to assail the shores of other continents. The vessels which crossed the high seas and appeared in the ports of Asia, Africa and America were loaded more with the destructive power of cannons and alien diseases than with wares to trade. Loot, plunder and fraud were the coins used by the European powers in the early phase of exchanges with other countries. The scene changed with time. Came the era of 'free trade', in the 19th century. Passing through further vicissitudes, lately trade relations among nations have come to acquire the traits of what is called 'new mercantilism'. The means of exploitation might have assumed new forms through the ages, but the countries of Asia, Africa and Latin America have always remained at the receiving end of the line.

Today the modality is quite subtle and sophisticated. The tentacles of neocolonialism are less visible but more widespread and, to that extent, complex in their operation. Trade is only a part of this exploitative network. Besides, the published data on international trade as such reveal very little of the totality of arrangements. Prices of traded items may not communicate much unless one also knows the terms and conditions of payment, namely, the availability of credit, interest charges, and the like. Furthermore, in a sense, international trade is a misnomer; nations do not trade; rather the *bourgeoisies* of two nations trade among themselves. Sometimes even that is not fully true. For example, some 40 per cent of the Latin American manufacturing exports come from US subsidiaries; to that extent it is an internal transfer within the multinational corporations themselves.

This essay began as an attempt to see how far the price differentials

charged by various countries engaged in trade with India can be ascertained from the published data. The issue is important in view of the recent complaints from certain quarters about the alleged practice of overpricing. The first thing which struck us was that given the degree of aggregation and the insensitivity of the data to qualitative variations in commodities, inter-country comparison of prices is extremely hazardous. But then, this problem is endemic in all such exer-

cises with data. So, with due reservation, we decided to proceed. Meanwhile, we could also locate a source of information on the foreign trade of China. The formula for relative price index that was constructed for India was applied also in the case of China. The computations are given in the Tables, with brief interpretations.

## METHODOLOGY

The purpose is to find an overall index of relative prices for exports to,

TABLE 1 : SHARE IN INDIA'S FOREIGN TRADE

(Per Cent)

Country	1968-69		1970-71	
	Import	Export	Import	Export
Bulgaria	0.52	0.54	0.95	0.63
Czechoslovakia	1.85	2.34	1.24	1.93
Germany: GDR	1.08	1.47	1.14	1.61
Hungary	0.73	0.74	0.92	0.90
Poland	1.14	1.84	1.72	1.45
Rumania	0.39	0.41	1.01	0.90
USSR	10.04	10.94	6.49	13.77
Hong Kong	0.05	0.84	0.05	1.12
Malaysia	0.41	0.52	0.35	0.77
Singapore	0.48	0.97	0.07	1.15
Indonesia	0.01	0.41	0.02	0.27
Ceylon	0.10	1.72	0.18	2.09
Iran	4.53	1.58	5.61	1.75
Iraq	0.16	0.85	0.19	0.59
Saudi Arabia	0.67	0.81	1.48	0.95
Argentina	0.32	0.05	0.25	0.22
Brazil	0.21	0.02	0.22	0.06
Sudan	1.13	1.36	1.28	2.51
Nigeria	0.01	0.23	0.00	0.57
Ghana	0.11	0.09	0.17	0.07
Senegal	0.01	0.01	0.03	0.01
Tanzania	0.91	0.37	1.08	0.29
Kenya	0.35	0.60	0.59	0.52
Zambia	0.43	0.09	1.68	0.19
Japan	6.05	11.68	5.11	13.26
USA	29.99	17.24	27.72	13.57
UK	6.68	14.83	7.77	11.15
Canada	5.17	2.19	7.17	1.83
Australia	1.35	1.88	2.24	1.60
Netherlands	0.93	1.13	1.17	0.91
Italy	2.58	1.32	1.77	0.91
Germany: FRG	6.29	1.93	6.58	2.11
France	1.91	1.48	1.31	1.18
Belgium	0.60	2.32	0.71	1.33
Switzerland	0.79	0.50	0.71	0.47
Sweden	0.88	0.34	0.60	0.39
Total	88.88	85.86	96.01	83.21

Source: DGCIS, Government of India, "Supplement to Monthly Statistics of the Foreign Trade of India" (Vol II), March 1969 and March 1971.



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or imports from, a given country. Let:

$p_{ij}$  = Price of commodity  $j$ , exported to / imported from, country  $i$ ;

$q_{ij}$  = quantity of commodity  $j$ , exported to / imported from, country  $i$ ; and

$$x_{ij} = p_{ij} \cdot q_{ij} \quad \dots (1)$$

Data of  $q$  and  $x$  are available from published sources; and  $p$  is calculated by  $x/q$ . Now the "world price" or the "average price" is calculated as follows:

$$\sum_{i=1}^m x_{ij} / \sum_{i=1}^m q_{ij} = p_j \text{ (say)} \quad \dots (2)$$

This price is used as the reference point for computing the relative price charged to/by country  $i$  for commodity  $j$ .

Accordingly, define:

$$p'_{ij} = p_{ij} / p_j \quad \dots (3)$$

If  $p'_{ij}$  is greater than one, it can be said that the commodity  $j$  imported from country  $i$  has been overpriced as compared to the average level of prices. A similar interpretation holds in case of its being an export commodity by the country under reference. Summing up over all commodities, an overall index can be constructed in the following way:

$$\sum_{j=1}^n p'_{ij} / n = A_i \text{ (say)} \quad \dots (4)$$

where  $n$  is the number of commodities. This is a simple average of the indices. It may be worthwhile to consider a weighted average also, the weight being equal to the relative importance of the commodity concerned. In that case, we get:

$$\sum_{j=1}^n w_{ij} p'_{ij} = B_i \text{ (say)} \quad \dots (5)$$

$$\text{where } w_{ij} = x_{ij} / \sum_{j=1}^n x_{ij} \quad \dots (6)$$

Note that if a country charges prices which are at par with the respective 'average prices' then the two measures,  $A$  and  $B$ , would have each the value of one. That is to say, deviation from one indicates the extent of overpricing or underpricing on the whole. The second thing to be noted is that, the construction of the index being what it is, a major trading partner would tend to be shown in more favourable light; while the angulari-

TABLE 2 : RELATIVE PRICE INDEX OF INDIA'S FOREIGN TRADE, MEASURE B

Country	1968-69		1970-71	
	Import	Export	Import	Export
Bulgaria	1.305	1.143	0.914	1.086
Czechoslovakia	0.896	1.077	2.218	1.173
Germany : GDR	0.826	0.936	1.176	1.014
Hungary	0.887	1.016	0.938	1.217
Poland	1.101	1.131	0.875	1.056
Rumania	1.741	1.089	0.950	1.103
USSR	1.013	1.129	0.918	1.260
Hong Kong	1.321	1.091	1.197	1.180
Malaysia	1.161	1.223	0.968	1.028
Singapore	0.935	1.017	1.008	1.087
Indonesia	1.244	1.011	1.540	1.077
Ceylon	0.981	1.005	0.794	1.057
Iran	0.997	1.466	1.013	1.469
Iraq	0.905	1.305	0.967	1.246
Saudi Arabia	1.081	1.302	0.931	1.107
Argentina	0.826	1.037	0.884	0.923
Brazil	0.878	1.258	0.927	1.115
Sudan	0.971	0.847	1.121	1.078
Nigeria	0.947	1.361	NA	1.096
Ghana	1.028	1.337	1.035	1.212
Senegal	NA	0.439	1.235	0.900
Tanzania	0.983	1.152	0.991	1.438
Kenya	0.957	1.626	0.976	1.374
Zambia	0.993	1.140	0.952	0.914
Japan	1.002	0.960	0.993	1.047
USA	1.036	1.028	1.035	1.045
UK	1.123	0.999	1.363	1.015
Canada	0.976	1.027	1.284	1.071
Australia	0.909	1.052	0.974	1.068
Netherlands	1.235	1.121	0.962	1.111
Italy	1.638	1.207	1.178	1.308
Germany : FRG	1.167	1.116	1.281	1.331
France	1.178	0.995	1.146	1.339
Belgium	1.332	0.910	1.199	0.902
Switzerland	1.741	1.104	1.584	1.544
Sweden	1.776	1.157	1.752	1.317

Source: Computed from the data of Government of India, DGCIS, Supplement to Monthly Statistics of the Foreign Trade of India (Vol II), March 1969 and March 1971.

ties of a minor trading partner may become exaggerated. If the bulk of the import of a commodity comes from one country, then the 'average price' of the commodity would be largely determined by the price charged by that country itself; see equation (2). Moreover, should the num-



TABLE 3: SHARE IN CHINA'S FOREIGN TRADE

(Per Cent)

Country	Import				Export			
	1964	1966	1968	1970	1964	1966	1968	1970
USSR	16.4	6.0	1.7	1.1	9.9	9.1	3.5	1.3
Poland	1.3	0.9	1.4	1.2	1.1	1.5	1.5	1.4
Bulgaria	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Yugoslavia	0.0	0.1	0.1	0.1	0.0	0.0	0.2	0.2
Czechoslovakia	1.1	1.0	—	—	0.7	1.2	—	—
Hong Kong	18.0	20.2	18.1	23.7	0.8	0.6	0.4	0.6
Malaysia	3.0	2.4	3.6	1.2	0.0	0.0	1.5	—
Singapore	3.3	3.7	6.8	6.4	0.0	2.3	1.6	1.2
Cambodia	0.5	0.7	0.3	0.1	0.5	0.3	0.5	0.2
Indonesia	3.2	1.7	1.7	1.6	3.8	0.5	0.0	0.0
Ceylon	2.2	1.9	1.9	2.5	1.9	1.9	1.9	2.2
Pakistan	0.8	1.2	1.3	1.4	3.0	1.6	1.5	2.1
Argentina	0.0	0.0	—	—	6.8	4.3	—	—
Brazil	0.0	0.0	—	—	0.0	0.1	—	—
Iran	—	0.5	0.1	0.1	—	0.0	0.1	0.2
Iraq	0.8	0.9	1.2	1.2	0.4	0.3	0.2	0.2
UAR Egypt	0.9	1.7	0.9	0.8	1.2	1.7	1.0	0.9
Trinidad T	—	—	0.1	0.1	—	—	—	—
Libya	0.1	0.3	0.6	0.5	—	—	—	—
Sudan	0.3	0.5	0.8	0.6	0.4	0.6	0.8	0.9
Nigeria	0.5	0.6	0.5	1.0	0.1	0.0	0.0	0.1
Ghana	0.1	0.3	0.1	0.3	0.2	0.3	0.0	0.1
Senegal	0.2	0.3	0.3	0.2	—	0.0	—	—
Congo BRA	0.0	0.0	0.1	0.1	0.0	0.0	—	—
Ethiopia	—	0.1	0.1	0.1	—	0.0	0.0	0.0
Tanzania	0.0	0.4	0.5	1.9	0.5	0.5	0.5	0.4
Kenya	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1
Australia	1.2	1.1	1.4	1.8	11.2	4.3	5.3	6.3
Netherlands	1.0	1.3	1.2	1.4	0.4	0.8	1.7	1.2
Canada	0.5	0.8	1.0	0.9	9.2	8.9	8.9	7.2
Switzerland	0.6	0.7	0.7	0.9	0.8	1.1	1.1	1.1
Italy	1.2	2.4	2.2	3.2	1.4	3.2	3.6	3.0
Germany : FRG	2.7	3.9	3.8	4.3	1.9	6.7	10.3	8.8
UK	3.6	3.9	3.7	3.6	3.6	4.6	4.0	5.4
France	1.6	2.2	2.4	3.5	3.6	4.8	5.2	4.3
Japan	8.2	12.7	10.1	12.9	11.2	16.3	19.2	30.1
Total	73.5	74.7	69.0	73.4	74.8	80.9	79.9	80.1

— denotes Not Available.

Source : IDE, "Foreign Trade of China", Tokyo

ber of commodities involved be large, the extreme values would be spread over a bigger area and the average approach unity; see equations (4)

and (5). On both these counts the countries with a significant volume of trade may come out with an index numerically close to one. So one should

look at not only the value of the index, but also the share of the country concerned in the relevant volume of trade.

After this exercise was well under way we came across the use of a similar index by Vaitos. He defines 'overpricing' by the following ratio:

$$100 (P_M - P_N) / P_W$$

where  $P_M$  is f o b price of imports, and  $P_W$  is f o b price in different world markets.<sup>1</sup> It may be interesting to know that in the light of this measurement Vaitos has concluded that "in the Colombian pharmaceutical industry, the weighted average overpricing of products imported by foreign-owned subsidiaries amounted to 155 per cent while that of national firms was 19 per cent. The absolute amount of overpricing for the foreign firms studied amounted to a figure of six times the royalties and twenty-four times the declared profits".<sup>2</sup>

## INDIA

Shares of the selected countries in India's foreign trade are given in Table 1. Exports are reckoned at f o b prices and imports at c i f prices. Table 2 gives the relative price index for these countries, as per equation (5). In two years, 1968-69 and 1970-71, the highest value for the index is 2.218 for imports and 1.626 for exports, and the lowest values are respectively 0.826 and 0.847. That is to say, the index duly reflects the wide price differentials as charged by the countries concerned. Two years is a very short span of time for making any generalisation. However, it seems that the index is somewhat more unstable over time specially in the case of the socialist countries. For example, the import price index for Bulgaria was 1.305 in 1968-69; it dropped to 0.914 in 1970-71; that for Czechoslovakia sharply rose from 0.89 to 2.218 during the same period. The prices of exports to these countries as charged by India are comparatively stable.

USSR, Iran, Japan, USA, UK, Canada, and West Germany were the major trading partners of India. Between the two years, 1968-69 and 1970-71, the prices of imports from the USSR became more favourable to India, the relative price index having dropped from 1.013 to 0.918; the imports from Iran became relatively more expensive to India. UK and West Germany increased the degree of over-



pricing of their commodities which were imported by India. Canada 'under-priced' in 1968-69 but 'overpriced' in 1970-71, while the USA continued the same moderate degree of overpricing, and Japan remained close to the average price level.

For a given imported commodity, the prices paid by India to all the countries from which it is imported are taken into account for computing the 'average price' that serves as the benchmark for the corresponding relative price. For a given commodity exported by India, however, the prices charged by India to various countries are similarly used. The overall relative export price indices thus calculated for various countries, as in Table 2, appear to be remarkably the same between the two years, 1968-69 and 1970-71. What is more interesting is that India seems to be 'overpricing' most of the countries, the index being numerically above one. What it possibly reflects is that India perhaps exports any particular commodity to a relatively small number of countries, and charges widely divergent prices for the same commodity. If this supposition is true then it implies that the base of India's export market is very narrow, and its pricing policy is discriminating. If so, it follows that India's export market is prone to instability being dependent on a few countries; and also that India's export goods may have a resale market giving rise to 'switch-trade'. At this stage we must emphasise that these observations are more in the nature of hypotheses which should be tested through in-depth analysis before they are finally either accepted or rejected.

#### CHINA

The data of China's foreign trade are not directly published by China. But it is possible to compile the figures from the other end, that is, the countries with whom trade takes place. The Institute of Developing Economies, Tokyo,<sup>3</sup> has collected and compiled the trade statistics of China in this way. The United Nations, the OECD and the trading partners themselves have been approached by the Institute for information. China exports to some 120 countries and imports from around 80 countries. All data for three socialist countries in Asia, namely North Korea, Mongolia and North Vietnam, as given in the report published by the IDE, are the Institute's own estimates. The

TABLE 4 : RELATIVE PRICE INDEX OF CHINA'S FOREIGN TRADE, MEASURE B (WEIGHTED)

Country	Import				Export			
	1964	1966	1968	1970	1964	1966	1968	1970
USSR	1.519	1.113	1.254	1.469	1.148	1.440	1.352	1.096
Poland	1.438	1.160	1.036	—	0.907	1.003	1.115	—
Bulgaria	2.356	—	1.175	—	0.959	1.088	0.922	—
Yugoslavia	0.247	4.245	1.710	2.235	0.583	1.649	3.565	1.474
Czechoslovakia	1.565	4.568	—	—	—	—	—	—
Hong Kong	1.014	0.981	1.115	0.998	1.760	1.755	1.569	1.083
Malaysia	1.060	1.031	1.077	1.1105	0.881	1.022	0.982	—
Singapore	0.955	1.015	1.020	0.980	1.078	0.962	1.010	1.764
Cambodia	1.443	1.353	1.310	1.061	2.987	1.675	0.961	0.867
Indonesia	—	1.105	3.112	2.965	—	0.784	—	0.053
Ceylon	0.943	0.813	0.894	—	1.007	1.149	1.006	—
Pakistan	—	—	0.826	0.763	—	0.869	1.913	0.830
Argentina	1.474	1.894	—	—	1.021	0.946	—	—
Brazil	1.006	1.773	—	—	0.405	0.923	—	—
Iran	—	1.335	2.406	2.093	—	3.869	1.211	1.514
Iraq	—	1.073	—	1.278	—	0.826	—	0.851
UAR Egypt	1.129	1.110	1.403	1.396	0.748	1.470	1.316	1.435
Trinidad T	—	—	1.270	1.152	—	—	—	—
Libya	—	—	0.953	1.108	—	—	—	—
Sudan	0.987	0.955	1.596	0.940	2.263	1.042	0.968	0.994
Nigeria	1.140	1.007	1.033	0.983	1.598	1.311	3.670	0.700
Ghana	0.894	1.276	4.016	1.263	—	1.046	1.071	0.698
Senegal	—	—	1.694	1.528	—	—	—	—
Congo BRA	—	—	1.299	1.157	—	—	—	—
Ethiopia	—	0.885	1.027	1.164	—	0.942	1.122	1.250
Tanzania	—	1.288	1.138	1.123	—	0.814	0.828	0.837
Kenya	—	1.211	0.852	0.716	—	1.447	1.019	0.835
Australia	—	—	1.496	1.197	—	—	0.900	1.947
Netherlands	1.074	1.268	1.128	1.1166	1.810	1.464	1.054	1.011
Canada	2.729	1.908	2.559	1.611	1.021	1.016	1.129	1.162
Switzerland	2.634	1.725	1.515	1.680	1.925	1.615	1.796	2.034
Italy	1.234	1.182	1.169	1.435	1.093	0.985	0.950	1.008
Germany: FRG	1.261	1.175	1.461	1.336	1.382	1.097	1.185	1.349
UK	1.527	1.167	1.163	1.365	2.534	1.240	1.176	1.093
France	1.400	1.027	1.163	1.272	0.931	1.100	1.023	1.014
Japan	1.058	1.111	0.994	1.199	0.982	0.959	0.999	0.840

Source : IDE, "Foreign Trade of China", Tokyo.

IDE reports are available for four years: 1964, 1966, 1968 and 1970, which obviously cover a very interesting phase in China's history that included the period of the Cultural

Revolution. We have taken the commodities at five-digit level, with a few unavoidable exceptions. The Chinese exports are valued on f o b and the imports on c i f basis, as a rule. Tables



TABLE 5 : RELATIVE PRICE INDEX OF CHINA'S FOREIGN TRADE, MEASURE A  
(UNWEIGHTED)

Country	Import				Export			
	1964	1966	1968	1970	1964	1966	1968	1970
USSR	1.528	1.274	1.811	1.673	1.353	1.450	2.209	1.459
Poland	1.685	1.392	1.356	—	1.199	1.057	1.120	—
Bulgaria	2.346	—	1.061	—	0.880	1.043	0.984	—
Yugoslavia	0.247	3.119	1.334	3.546	0.583	1.649	2.402	2.162
Czechoslovakia	2.717	4.568	—	—	—	—	—	—
Hong Kong	0.976	1.032	1.157	1.251	1.484	1.759	2.333	1.541
Malaysia	1.326	1.307	1.107	1.187	0.881	1.022	0.968	—
Singapore	1.142	1.289	1.193	1.183	1.064	0.920	1.045	3.835
Cambodia	1.697	1.314	1.713	1.572	1.393	1.206	0.734	0.694
Indonesia	—	1.107	1.493	3.145	—	0.866	—	0.053
Ceylon	1.045	1.363	1.279	—	1.007	1.110	1.076	—
Pakistan	—	—	1.006	0.973	—	1.275	1.298	0.668
Argentina	1.727	2.010	—	—	0.829	0.709	—	—
Brazil	1.418	1.773	—	—	0.405	0.934	—	—
Iran	—	1.259	2.246	2.458	—	3.869	1.177	1.259
Iraq	—	1.085	—	2.573	—	0.891	—	0.770
UAR Egypt	1.312	1.382	1.874	2.125	0.712	1.651	1.283	1.031
Trinidad T	—	—	1.520	3.157	—	—	—	—
Libya	—	—	1.391	1.723	—	—	—	—
Sudan	1.248	1.244	1.589	1.357	2.263	1.337	1.009	1.068
Nigeria	1.327	1.466	1.270	1.138	1.198	1.311	4.024	0.778
Ghana	1.092	1.490	2.829	1.727	—	1.318	1.071	0.698
Senegal	—	—	2.335	2.413	—	—	—	—
Congo BRA	—	—	1.888	1.343	—	—	—	1.572
Ethiopia	—	1.057	1.173	1.237	—	0.924	1.122	1.158
Tanzania	—	1.385	1.357	1.421	—	1.183	0.911	1.562
Kenya	—	1.278	1.150	1.115	—	1.859	1.283	0.890
Australia	—	—	1.487	1.210	—	—	0.697	1.853
Netherlands	1.376	1.386	1.413	1.321	1.668	1.705	1.499	1.784
Canada	1.428	1.533	2.553	3.121	0.996	1.142	8.262	1.892
Switzerland	2.239	2.093	2.458	2.575	2.338	1.815	2.954	3.320
Italy	1.497	1.222	1.325	1.123	1.353	1.076	0.944	1.416
Germany: FRG	1.808	1.376	1.783	1.457	1.659	1.393	1.328	1.583
UK	1.540	1.492	1.183	1.111	1.586	1.066	1.618	1.617
France	1.718	1.336	2.385	1.578	1.477	1.504	1.862	1.708
Japan	1.296	1.422	1.293	1.532	1.017	0.967	1.059	1.080

— denotes Not Available.

Source : IDE, "Foreign Trade of China", Tokyo.

3, 4 and 5 give the relevant computations for a number of selected countries which together account for over seven-tenths of China's foreign trade.

Table 3 gives the shares of trading

partners in the exports and imports of China. It is important to recall that the relative price index, as of Tables 4 and 5, is prone to assume erratic values in case the volume of transactions is very

small. This is exemplified by the export of China to Indonesia in 1970 which was quantitatively negligible, but not exactly nil; and only one commodity was involved. The price index turned out to be almost absurdly small. Table 4 shows the *weighted* relative price index computed on the basis of equation (5); Table 5 gives the *unweighted* index based on equation (4). The weighted price index of Chinese imports as of Table 4 was quite uneven during the four years, among the countries and over time. Japan appears to have maintained the index, both for imports and exports, within a small range around one. The import price index was consistently above one, in the case of other advanced capitalist countries like Australia, Netherlands, Canada, Switzerland, Italy, West Germany, UK, and France. A sizeable proportion of China's imports, however, comes from Hong Kong; and the corresponding import price index was nearly one. As for exports, Japan is the largest single partner followed by Canada. In both the cases, the weighted relative price index was in the neighbourhood of one. Taking all the countries together, the Chinese export price index is more widely dispersed than that of India's. Whether it signifies a greater degree of flexibility in China's export pricing remains an interesting area of research.

Again, it should be borne in mind that the relative price index is but one of the many dimensions of economic relations among countries. Any sweeping conclusion on the basis of this index alone is unwarranted. However, in view of the frequently-heard conjectures and views the sooner a scientific analysis of the issues involved begins the better it is for all concerned.

### Notes

[Ratan Ghosh has done all the painstaking calculations of this paper. His able research assistance is gratefully acknowledged, without implicating him for the conclusions.]

- 1 C Vaitos, "The Process of Commercialisation of Technology in the Andean Pact", in Hugo Radice (ed), "International Firms and Modern Imperialism" (1975), p 211.
- 2 *Ibid.*
- 3 Institute of Developing Economies, "Foreign Trade of China, 1964, 1966, 1968 and 1970", Tokyo.



# Economic Relations between Socialist Countries and the Third World

Deepak Nayyar

*In recent years, economic ties between the socialist countries and the Third World have become quite strong. Indeed, in the world of today, they represent an important part of the development strategy for several poor countries.*

*This occurrence is rather interesting for two reasons. First, trade between the socialist countries and the Third World is now one of the most dynamic components of world commerce. Second, and more important, it represents a strengthening of ties between two sets of countries with entirely different political and economic systems.*

*It would be worthwhile, therefore, to examine the nature of this relationship and its implications for the poor.*

## I

### Introduction

THE literature on development economics abounds with studies of the relations between rich and poor countries. More often than not, however, these studies focus attention on the Western capitalist countries and their economic relations with the less developed nations of the world. In fact, the most controversial issues raised by economists, when considering the international aspects of development and underdevelopment, have been discussed in this context. These issues range from questions about aid, private foreign investment and transfer of technology to debates about the terms of trade between countries. All such problem areas have been subjected to a considerable amount of research. Strangely enough, very little attention has been directed towards examining the relationship between the rich communist countries and the poorer nations, which for want of a better phrase, I shall refer to as the Third World.

In recent years, the economic ties between the socialist countries and the Third World have become quite strong. Indeed, in the world of today, they represent an important part of the development strategy for several poor countries. It is hardly surprising that the developed socialist countries of Eastern Europe, including the USSR, should have attempted to assist the less developed socialist countries such as Cuba, Mongolia, North Korea and North Vietnam. Much less predictable is that the socialist countries have sought to assist the development process in the poor capitalist countries, through economic and technical assistance. But that is not all. The past two decades have also witnessed a phenomenal growth in trade between

the socialist bloc — USSR and Eastern Europe — on the one hand, and the less developed capitalist countries on the other.<sup>1</sup> This occurrence is rather interesting for two reasons. In the first place, such trade is one of the most dynamic components of world commerce. Secondly, and in my view more important, it suggests a strengthening of economic ties between two sets of countries with entirely different political and economic systems. It would clearly be worthwhile to examine the nature of this relationship, and its implications for the poor countries. Yet, in terms of research this is a relatively unexplored area.<sup>2</sup> The economic aspects of relations between the socialist countries and these less developed capitalist economies is, therefore, the theme of my paper.

As a starting point, it is necessary to outline the dimensions of the relationship. The next section, which is devoted to that task, sets out the orders of magnitude as well as the trends in trade and aid. Section III examines the implications of these economic ties for the poor countries and attempts to determine the conditions under which they might derive significant benefits. The interest of the socialist countries, in establishing such widespread economic interaction with the underdeveloped capitalist world, is explored in section IV. The final section of the paper seeks to provide an overall evaluation and comment upon the political economy of the relationship.

## II

### Dimensions of the Relationship

Over the last fifteen years, the European socialist countries have established economic relations with a very large number of countries in the Third

World. A significant proportion of these ties have been developed since the late 1950s, when several newly independent nations emerged from the colonial era in Asia and Africa. There is no doubt that the relationship between the two groups of countries strengthened considerably in subsequent years. That is borne out by available evidence.

Table 1 outlines the trends in trade between the European socialist countries and the less developed capitalist countries over the past two decades. Trade expansion was indeed quite remarkable. From 1952 until 1968, the turnover of trade virtually doubled every four years. The growth did slow down thereafter but, in absolute terms, the increase was very substantial. Given the orders of magnitude, it is not surprising that this trade accounted for an increasing share of the total trade for both groups of countries. Between 1960 and 1970, the share of the developing countries in Soviet and East European exports rose from 8.1 per cent to 14.8 per cent while in imports it increased from 8.8 to 11.1 per cent.<sup>3</sup> Over the same period, the share of the socialist countries in exports of the developing world increased from 4.0 to 5.7 per cent while their share in imports rose from 3.6 to 7.8 per cent.<sup>4</sup> Available evidence suggests that such trade expansion has not continued in the last few years, even though relative shares have been maintained at the levels attained in 1970.<sup>5</sup>

It is interesting that East European trade with the less developed socialist countries increased at a much slower rate than trade with the less developed capitalist countries. To some extent, of course, this occurrence is explicable. The former group is constituted by a very small number of countries, including China. After the Sino-Soviet rift, there was a sharp con-



traction in trade between the USSR and China which is reflected in the much lower turnover during the 1960s.

It should also be pointed out that socialist bloc trade has been quite evenly distributed across the three continents of the underdeveloped world. Over the last decade or so, Asia accounted for 40 per cent of the trade turnover while Africa and Latin America accounted for 30 per cent each.<sup>6</sup> Within these continents, however, trade as well as economic relations have been directed towards a limited number of nations. The major trading partners of the socialist countries in the Third World have been: Argentina and Brazil in Latin America; Algeria, Egypt, Ghana, Sudan, and Tanzania in Africa; Afghanistan, India, Iran, Iraq, Malaysia, Pakistan and Sri Lanka in Asia.<sup>7</sup> Taken together, these countries were responsible for a little more than 70 per cent of socialist trade with the Third World, during the decade that ended in 1970. Among them India and Egypt were overwhelmingly important.

The economic assistance extended by the socialist world to the poor capitalist countries has also been concentrated in a similar manner. If anything, the aid has been directed towards even fewer nations. Over the period 1954-1972, the fifteen principal recipients of aid, listed in Table 2, accounted for 83 per cent of the total funds committed by the socialist countries to the underdeveloped capitalist world; Egypt and India alone received 29 per cent of the total.<sup>8</sup> The USSR was the principal donor responsible for 52 per cent of all the commitments, while the East European countries contributed another 32 per cent.<sup>9</sup> The rest is accounted for by Chinese aid which has become significant only in recent years and has largely been extended to African countries south of the Sahara.

Trends over time are difficult to establish because statistical information is limited. All the same, it is fairly certain that the increase in aid did not match the trade expansion.<sup>10</sup> In absolute terms, of course, socialist aid is not very large particularly when compared to the total foreign aid received by the Third World. However, the fact that it has been concentrated in a small number of countries means that it might well be quantitatively significant in those countries. Soviet aid to Egypt is an obvious example.<sup>11</sup> Whether poor countries derived any benefits from such economic assistance is a

TABLE 1 : TRADE BETWEEN THE SOCIALIST COUNTRIES OF EASTERN EUROPE (a) AND THE THIRD WORLD

(in US \$ million)

	1952	1956	1960	1964	1968	1972
(A) Less developed Capitalist Countries (b)						
Exports to :	175	470	880	2100	3070	5080
Imports from : (d)	215	405	950	1520	1940	2820
Trade Turnover :	390	875	1830	3630	5010	7900
(B) Less developed Socialist Countries (c)						
Exports to :	860	1213	1767	1122	1717	2180
Imports from : (d)	610	1130	1722	1010	863	1160
Total Turnover :	1470	2343	3489	2132	2580	3340

Notes : (a) Albania, Bulgaria, Czechoslovakia, East Germany, Hungary, Poland, Rumania and the USSR.

(b) Corresponds to the UN category of developing market economies.

(c) China, Cuba, Mongolia, North Korea and North Vietnam.

(d) These figures are based on exports of the less developed capitalist/socialist countries to the socialist countries of Eastern Europe. Although this may not be entirely accurate, it does provide a reasonable approximation.

Source: United Nations, "Year book of International Trade Statistics", several issues.

question which will be discussed later in the paper.

The remarkable growth in economic co-operation between the socialist countries and the Third World has taken place largely in a framework of bilateral agreements. Economic aid, development credits, technical assistance, offers of scientific co-operation and trade are all incorporated into long-term agreements negotiated with individual governments. In fact, bilateralism is an integral part of the overall system of economic relations between the communist countries and the less developed world. Although this framework is somewhat different from the usual *modus operandi* of international trade and commerce, it is to be expected that socialist economies would want to plan their economic relations with the rest of the world, as a part of the process of planned production.

The principal features of such an arrangement between a socialist country and a poor capitalist country are as follows:<sup>12</sup> (i) The agreement specifies the objectives of economic co-operation for both partners and attempts to set out planned needs as accurately as possible. (ii) Trade balances outstanding at the end of each period are settled in exports and imports of mutually agreed products or in inconvertible currency. (iii) The socialist partner pledges to provide economic assistance in the form of capital equipment, technology, knowhow etc. Aid as well as debt repayments are automatically converted into trade flows; credits extended to

the poor country, for instance, can be repaid in the inconvertible domestic currency, traditional exports or the output of aid-financed projects. (iv) As far as possible, all transactions are carried out in terms of world prices, except that bilateral agreements seek to eliminate short-term fluctuations.

This is a typical, but by no means universal example. In a few cases, trade, along with the other transactions, is conducted in terms of hard convertible currencies. If that is so, trade with the socialist countries is no different from the usual international exchange of commodities as far as the poor country is concerned. Special advantages, or disadvantages, might arise only if the relationship has a bilateral character. Hence the following discussion is based on the most prevalent form of co-operation between the rich socialist and the poor capitalist countries.

In assessing the economic relationship between the socialist nations and the Third World, I shall focus attention on trade and, to some extent, aid. This does not mean that other aspects of the relationship are not important. Indeed they are. It is just that, in the economic sphere, trade is the principal medium of interaction between the two groups of countries.

### III

#### Implications for Poor Countries

For the poor capitalist economies the benefits of bilateral trade with the socialist countries seem fairly obvious



First, in the absence of this trade, economic assistance in the form of development credits may not have been extended by the centrally planned economies of Eastern Europe. Second, given the extreme shortage of foreign exchange in most of these countries, the introduction of bilateralism added to import capacity, at the same time underwriting an expansion in exports. This is particularly significant in view of the problems faced by underdeveloped countries attempting to promote export growth. What is more, the existence of the special payments arrangements reduced the burden of debt servicing in so far as repayments could be made in exports, domestic currency or the output of aid-financed projects, instead of scarce convertible foreign currencies.<sup>13</sup>

Although the benefits appear to be quite straightforward, any measurement or quantification poses a problem. It is clear that an expansion of trade *per se* is no index of the gain accruing to poor countries. After all, it is perfectly possible that a part of the increase in exports to bilateral agreement markets is illusory, in as much as it represents a diversion of exportable commodities away from other traditional markets. Alternatively, the prices received for exports may not be favourable. Even if they are, the real benefit of bilateral trade would also depend upon the choice of imports offered by the socialist countries and the import prices charged. In principle, therefore, an evaluation of the gains from trade must be based on some assessment of: (i) the net increase in exports, (ii) the composition of imports, and (iii) the terms of trade obtained.

This kind of conventional analysis is necessary in order to say something about the distribution of gains from trade between communist countries and the Third World. A complete evaluation of trade with the socialist countries, however, must go beyond the apparent net gains or losses arising from an international exchange of commodities, and examine the impact of trade on development. It must also consider how the gains from trade are distributed inside a poor country, for gains accrue not so much to countries as entities as to groups or classes *within* countries.

The traditional view of trade as an engine of economic growth is considerably discredited, particularly in the context of poor capitalist countries. In fact, economists of radical persuasion have argued the opposite, suggesting that trade between unequal partners might be responsible for the perpetuation of

underdevelopment and the widening gap between rich and poor countries.

In a very elementary sense, of course, there are gains to be derived from trade if, for an economy, imports of a commodity are cheaper than production at home in terms of domestic resources used. The real world is far more complex. In a poor country, the import of commodities, technology or capital from abroad might inhibit local capitalist development, discourage indigenous technical progress, introduce demand patterns inappropriate for the level of income in the economy and, perhaps, worsen income distribution. Similarly, export specialisation in a narrow range of commodities might freeze the economy into a structure of production and pattern of trade which evolved during the colonial era. It would involve too much of a digression to embark on a discussion of these issues here. Suffice it to say that increased trade in itself is not desirable. While some benefits might arise out of commodity exchange across national boundaries, trade should also assist a poor country in harnessing its productive resources so as to alter the structure of production and to set in motion the forces of development. Thus one important question is whether or not international trade places a poor country on the road to independent development. The other fundamental issue is who gains from such trade within the underdeveloped countries.

The implications of trade between the poor capitalist countries and the socialist economies of Eastern Europe must, therefore, be examined at two levels. To begin with, it is necessary to consider the simple gains from trade which accrue to countries in the aggregate. The following discussion tends to focus attention on this aspect of the problem. The subsequent analysis of the broader issues arising from trade with the socialist world is somewhat brief although, in my view, it is more important. I hope to develop it further in another paper.

#### (A) GAINS FROM TRADE

It was established earlier that the benefits derived from trade with the socialist countries depend upon the net increase in exports, the composition of imports and the terms of trade obtained. I shall examine each of these factors with reference to the experience of Third World countries.

There are two reasons why the net export growth in trade between the socialist bloc and the underdeveloped world may be less than the apparent

TABLE 2: ECONOMIC ASSISTANCE FROM THE SOCIALIST BLOC TO THIRD WORLD COUNTRIES: 1954-1972

	Gross Commitments (in US \$ millions)
Egypt	2327
India	1830
Iran	1401
Iraq	965
Algeria	907
Indonesia	794
Brazil	726
Pakistan	638
Syria	587
Afghanistan	576
Sudan	283
Tanzania	280
Sri Lanka	218
Chile	202
Argentina	174

*Note:* The data in this Table include Chinese aid but, among the countries listed above, only Pakistan, Tanzania and Sri Lanka received substantive aid from China.

*Source:* United Nations, "Statistical Yearbook 1973", p 715.

increase. In the first place, it is possible that a poor capitalist country meets a part of its commitment under bilateral agreements by diverting exports away from convertible currency markets to the new trading partners. Now, as long as there is no constraint on increasing the domestic production of exportables, the question of diversion does not arise. However, supply conditions might be such that domestic production cannot be stepped up adequately to meet all increases in demand. Secondly, socialist countries might re-export goods imported under special agreements to the rest of the world. They may do so for the following reasons. Many of them suffer from foreign exchange shortages, and the resale of products imported from poor capitalist countries through bilateral arrangements might be one way of obtaining convertible currencies. Alternatively, it is possible that on account of overall trade commitments they have to import goods for which there is little demand; such products might then be dumped on the world market, again for the purpose of obtaining foreign exchange.

What is the likelihood of implicit diversion and of re-export? The former is an empirical question about which generalisations are rather difficult. However, research on India's trade with the socialist countries has shown that a very large proportion of exports under bilateral trade constituted a net growth in exports.<sup>14</sup> The second question is more susceptible to analysis. While there have no doubt been instances of



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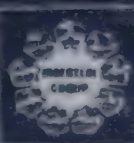
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re-export by the socialist countries, this occurrence could not have been all that widespread. The argument is quite straightforward. It is well known that a large number of traditional commodity exports from the Third World are faced by near saturated markets and rather low income elasticities of demand in the metropolitan countries. In such cases, the socialist countries provide welcome new markets; there is obviously little room for re-exports on a significant scale. It is also most unlikely that the communist countries could have resold manufactured goods imported from the Third World in Western capitalist countries for the simple reason that, in such goods, product differentiation, brand names and quality are rather important, and exporting involves marketing expenses in the form of advertising costs etc. As a matter of fact, poor countries themselves have found it rather difficult to increase their exports of manufactures, so that socialist economies are unlikely to have fared better with the same goods.

A priori reasoning of the kind set out above can always be challenged on the basis of empirical evidence from individual countries, but that is a problem with most generalised hypothesis. Apropos this issue, however, an important point still needs to be made. To the extent that there is an implicit diversion of exportables, trade with the socialist countries obviously does not lead to a net gain, but it should be stressed that it does not necessarily constitute a loss. That would happen only if the terms of trade actually worsen on account of bilateral trade. All the same, there are economists who argue that a premium attaches to convertible foreign exchange earned, so that even at equivalent terms of trade any diversion of exports constitutes a cost. On the contrary, it is possible to argue that the uncertainty and risk of convertible currency markets is largely eliminated in bilateral trade markets owing to the contractual nature of long term agreements, thereby yielding a benefit.

A characteristic feature of trade between the socialist countries and the Third World is that transactions are frequently carried out in terms of inconvertible currencies. Given that export earnings from such trade can only be utilised to finance imports of goods and services from the USSR and Eastern Europe, the composition of imports is clearly of considerable importance. The point at issue is whether a poor capitalist country's imports under bilateral

agreements are high priority items necessary for its development programme or are they low priority goods which it is forced to buy in order to use up the trade surplus in its favour. Of course, the price and quality competitiveness of these imports is equally important.

An examination of international trade statistics reveals that machinery and transport equipment account for nearly half of the poor capitalist countries' imports from the socialist world, while intermediate goods such as base metals, chemicals, fertilisers and petroleum products constitute a very large proportion of the remainder. During the early 1970s, these manufactures accounted for approximately 80 per cent of exports from the European socialist countries to the Third World.<sup>15</sup> There is no doubt that capital goods and intermediate products are essential to the industrialisation programme in poor countries, and not low priority goods which they were forced to import. Of course, it is possible to argue that such imports could, alternatively, have been obtained in the world market. Indeed they could, but not with the same ease because most poor capitalist countries suffer from acute shortages of convertible foreign exchange. Thus, buying on the world market may not have been a feasible option for many of them.

The pattern of trade is obviously relevant to our analysis but it cannot be considered in isolation from the terms of trade. Under bilateral agreements, the terms of trade are directly dependent on prices received for exports and prices paid for imports. Therefore, in order to compare the terms of trade obtained from the socialist countries with those obtained from the rest of the world, price comparisons are unavoidable. It need hardly be stressed that prices of traded goods are notoriously difficult to compare because of quality variations which are present not only in manufactured goods but also in apparently homogeneous primary commodities. Nevertheless, to the extent that it is possible to indulge in price comparisons, evidence available from Egypt, India, Pakistan, Bangladesh and Tanzania suggests that socialist countries offered terms which were sometimes better and, at any rate, no worse than those offered by the rest of the world.<sup>16</sup>

If one thinks about this statement, it stands to reason. After all, socialist bloc trade with the capitalist economies is carried out on a commercial

basis. State trading corporations from Eastern Europe and the USSR conduct transactions with local capitalists or traders in the Third World;<sup>17</sup> there is no reason why individual exporters should sell for less than prices obtainable elsewhere or individual importers should pay more than the going price.<sup>18</sup> If anything, it is likely that socialist countries attempting to establish trade relations with poor capitalist economies have to offer small premiums in order to break into long established market channels.

The existence of the socialist bloc as an alternative outlet for exports might offer two special advantages to the poor countries. Trade with the socialist countries might improve the terms of trade *vis-a-vis* the rest of the world and it might create greater export stability. Both these points need some elaboration. The first is best explained through an example. Suppose a poor capitalist country exports a primary commodity and is an important supplier in the world market. Let us also assume that there are no close substitutes, that the short-term supply elasticities in competing countries are low and that the demand is price inelastic. Incidentally, these conditions are quite common in the world market for some commodities. Now, if the socialist countries buy a significant proportion of the poor country's exportable output of the commodity, their entry into the market might push up prices and thereby improve the terms of trade for the exporter. Empirical investigation is obviously necessary but Egyptian cotton, Brazilian coffee, Ghanaian cocoa and Indian tea or cashew nuts are possible examples where this might have happened.

There remains the question of stability. Fluctuations in the level of prices and of demand are a common feature of world commodity markets and an inherent characteristic of capitalist systems. Underdeveloped countries dependent on the export of one or a few commodities are therefore particularly vulnerable. In such cases, economic relations with the socialist bloc could give rise to immense benefits not only because centrally planned economies are less prone to fluctuations in the level of economic activity, but also because they offer the possibility of longterm contractual agreements. A superficial examination of trade statistics may show a considerable amount of variability in the volume of exports even to the socialist countries.



This is because poor capitalist countries tend to use socialist markets as outlets in bad years and in periods when they find it difficult to sell elsewhere. Once again, this is a matter for empirical investigation; what is being said here is that conclusions about the stability or instability of bilateral agreement markets should not be drawn from looking at data on exports to the socialist countries in isolation. It is important to see whether trade with the socialist countries makes for greater export stability on the whole.

#### (B) WIDER IMPLICATIONS

The discussion so far has concentrated attention on questions about circulation and international commodity exchange, which provides only a partial view of the problem because trade also influences production relations within an economy. Hence it is necessary to consider the effects of trade with the socialist countries on the structure of production and on income distribution in the poor capitalist economies.

The international division of labour between metropolitan and peripheral countries took shape in the colonial era when the world economy was dominated by imperialist powers. Under such conditions, the needs of capitalist development in the Western world were paramount while all developments in the colonies were subordinate to these needs. Apart from a few modifications, this division of labour has continued in the post-independence years. Trade with the Western capitalist countries has tended to reinforce the historically determined patterns of production and trade in the Third World. Does trade with the socialist countries offer an opportunity to change the situation? If so, poor capitalist economies are likely to derive substantial benefits from their economic relations with the socialist world. Within these economies, of course, the distribution of benefits might be rather unequal. As we shall see later, that is what did happen.

It was pointed out earlier that a very large proportion of Third World imports from the rich communist countries are constituted by capital goods and intermediate products, both of which should stimulate industrial production. The impact of these imports on the pattern of production and, therefore, trade is obviously quite crucial. Such imports are financed either through exports by the poor countries or through economic assistance offered by the centrally planned economies of Eastern

TABLE 3 : EXPORTS OF MANUFACTURES (a) FROM POOR CAPITALIST ECONOMIES (b) TO THE EUROPEAN SOCIALIST COUNTRIES.

(in US \$ million)

Product Group	1962	1966	1969	1970	1971	1972	1973
Textiles	83	152	165	215	220	300	285
Miscellaneous Manufactures (c)	15	64	159	166	211	226	317
Chemicals	17	45	44	41	43	40	55
Machinery and transport equipment	1	4	5	5	10	22	22
Total above	71	265	373	427	484	588	679
Manufactured exports as a percentage of total exports	5.0	11.0	16.9	15.4	18.1	19.9	16.8

Notes : (a) SITC Sections 5 to 8 less division 68.

(b) Corresponds to the UN category of developing market economies except for 1962 and 1966 because the UNCTAD classification includes Cuba and Israel in the category of developing countries.

(c) SITC sections 6 and 8, excluding textiles and non-ferrous metals.

Sources : The data for 1962 and 1966 are taken from UNCTAD, "Trade in Manufactures of Developing Countries", 1972 Review, New York, 1974, p 33. The figures for the period 1969-1973 have been calculated from the UN *Monthly Bulletin of Statistics*, July 1975, pp xxiv-xxxix.

Europe. In a poor capitalist economy, the composition of imports financed by exports depends largely on internal factors. The socialist world can exercise some influence only in the case of aid-financed imports.

There is no doubt that the principal objective of socialist aid to the Third World has been to develop a modern industrial sector in the underdeveloped economies and to harness the productive resources available. The investments have, in fact, been concentrated in (i) the development of natural resources such as coal and oil, (ii) the setting up of infrastructural projects, e.g., dams, power stations, transport and communication networks, and (iii) the building of industrial complexes for the production of steel, base metals and chemicals.<sup>19</sup> The credits extended for for these purposes have usually been for a period of 10 to 15 years at interest rates ranging from 2 to 3 per cent. A characteristic feature of socialist aid has been the debt servicing mechanism which enables poor countries to make repayments in traditional exports or in the output of aid-financed projects.<sup>20</sup> A potential advantage of this arrangement is that, over a period of time, a poor capitalist country can reduce its dependence on external finance.<sup>21</sup>

But all this is in the realm of possibility. The important question is whether or not trade as well as other economic relations with the socialist world, in fact, place a poor capitalist economy on the road to self-reliant development. If that is the case, it must be reflected in changes both in the structure of pro-

duction and in the pattern of trade. As such, it is necessary to look at the actual experience of Third World countries. Available evidence suggests that these changes did not occur to any significant extent; and I shall return to this issue a little later.

#### IV

#### The Interests of Socialist Countries

It is now apparent why the poor capitalist countries of Africa, Asia and Latin America might have sought to establish economic ties with the rich communist countries of Eastern Europe. But what interest did the socialist world have in developing such extensive economic relations? In my view, as far as the socialist countries are concerned, there are two sets of objectives which may have prompted the relationship with the underdeveloped capitalist world: those that tie in with their own economic interests and those that relate to the needs of poor countries. Before discussing the outcome, it is worth spelling out each of these objectives briefly.

The last fifteen years have witnessed a considerable amount of change in the attitude of the COMECON countries towards trade with the outside world and interaction with the world capitalist system. In the early years of socialist transition, foreign trade was assigned a minimal role but, of late, it has become an increasingly explicit and prominent factor in their strategy of growth. This change in the basic economic philosophy has meant that the plans of all Eastern European countries assign trade and the international division of labour an



important role in shaping the domestic economy. The expansion of economic relations with the poor capitalist countries should, therefore, be seen in its broader context. But there are other, more positive, reasons which stem from the economic interests of communist countries. Trade with the poor world offers the European socialist countries an opportunity of importing goods which are either too expensive to produce at home or cannot be produced at all. Under bilateral arrangements, such imports are then financed through exports so that there is no need to part with scarce convertible currencies.<sup>22</sup>

The second set of objectives relating to the needs of poor countries are the ones which are overtly stressed by the USSR and Eastern Europe. While pursuing their own economic interests, the socialist countries also want to establish stable economic, as well as political relations with the newly independent nations of the Third World. Given the history of exploitation by the Western capitalist countries, the communist countries tend to stress the equality of trading partners and express the desire to develop a new type of division of labour. The stated intention is to eliminate backwardness and assist in the development of a dynamic, modern sector in poor capitalist countries. It is hoped that this would ultimately raise the living standards of the poor in the Third World.

To what extent have these objectives been realised? Consider first, the interests of the socialist countries. In principle, it may be possible to meet all the import requirements from the world market but, in practice, most COMECON countries suffer from a scarcity of foreign exchange. Given the limited access to convertible currencies, the underdeveloped countries are a useful source of imports and also an obvious market outlet for exports. Thus the socialist countries have sold machinery, transport equipment and other manufactured goods to the poor world in exchange for primary products and industrial raw materials. Until as late as 1970, more than 75 per cent of East European exports to the less developed capitalist economies were constituted by manufactured goods, whereas primary products and raw materials accounted for more than 70 per cent of Third World exports to the socialist bloc.<sup>23</sup> Of course, such traditional patterns of trade can neither transform the structure of production in poor countries nor make for a new international division of labour. It need hardly

be stressed that diversification in the pattern of trade is an imperative first step towards those ends.

Table 3 outlines the trend in exports of manufactures from the underdeveloped capitalist economies to the socialist countries of Eastern Europe, including the USSR. There is no doubt the manufactured exports increased rapidly during the 1960s and early 1970s, both in absolute and relative terms. However, even as late as 1973, manufactured goods accounted for less than one-fifth of total exports from the poor capitalist world to the European socialist countries. In this diversification, India and Egypt fared better than other Third World countries, and, by 1972, more than 40 per cent of their total exports to the socialist bloc were manufactured goods.<sup>24</sup>

Admittedly, patterns of production and trade that have evolved in the poor countries over a long period of time could not have been changed overnight. However, in the past decade or so, the diversification in the pattern of trade, with the possible exception of India and Egypt, has not been very significant. The transition to the so-called international socialist division of labour clearly calls for a more determined effort towards diversification.

The socialist countries also attempted to assist poor capitalist economies in building up a modern industrial sector and in eliminating backwardness. There is no question about the efforts made towards the former; we have already seen that the bulk of socialist aid was channelled into the development of natural resources, infrastructural projects and basic industries. For political as well as economic reasons such assistance may not have been available from the metropolitan countries.

It is interesting that almost all the aid from socialist countries was concentrated in the public sector of Third World economies. This was, in fact, an explicit element of policy on the part of East European countries, prompted by a belief that, in underdeveloped countries, the state sector is the most capable of mobilising resources if the objective is to eliminate backwardness and, ultimately, alleviate poverty. Here is the fundamental mistake which reflects an inadequate understanding of the class character of the state in poor nations. While Socialist countries propagated and supported state capitalism as the most desirable path to development for the Third World, the state in these countries continued to protect the interests of the privileged classes. It is

now widely accepted that the principal beneficiaries of state capitalism in the underdeveloped world have been capitalists in the private sector and not the majority of the people. Under such circumstances, the economic benefits derived from trade with the socialist countries are unlikely to have filtered down and accrued to the poor. On the contrary, it is likely that the benefits were appropriated by local capitalists and traders. While it might be tempting to do so, this occurrence cannot be blamed on socialist trade and aid because it was the outcome of factors internal to the polity of Third World countries.

## V

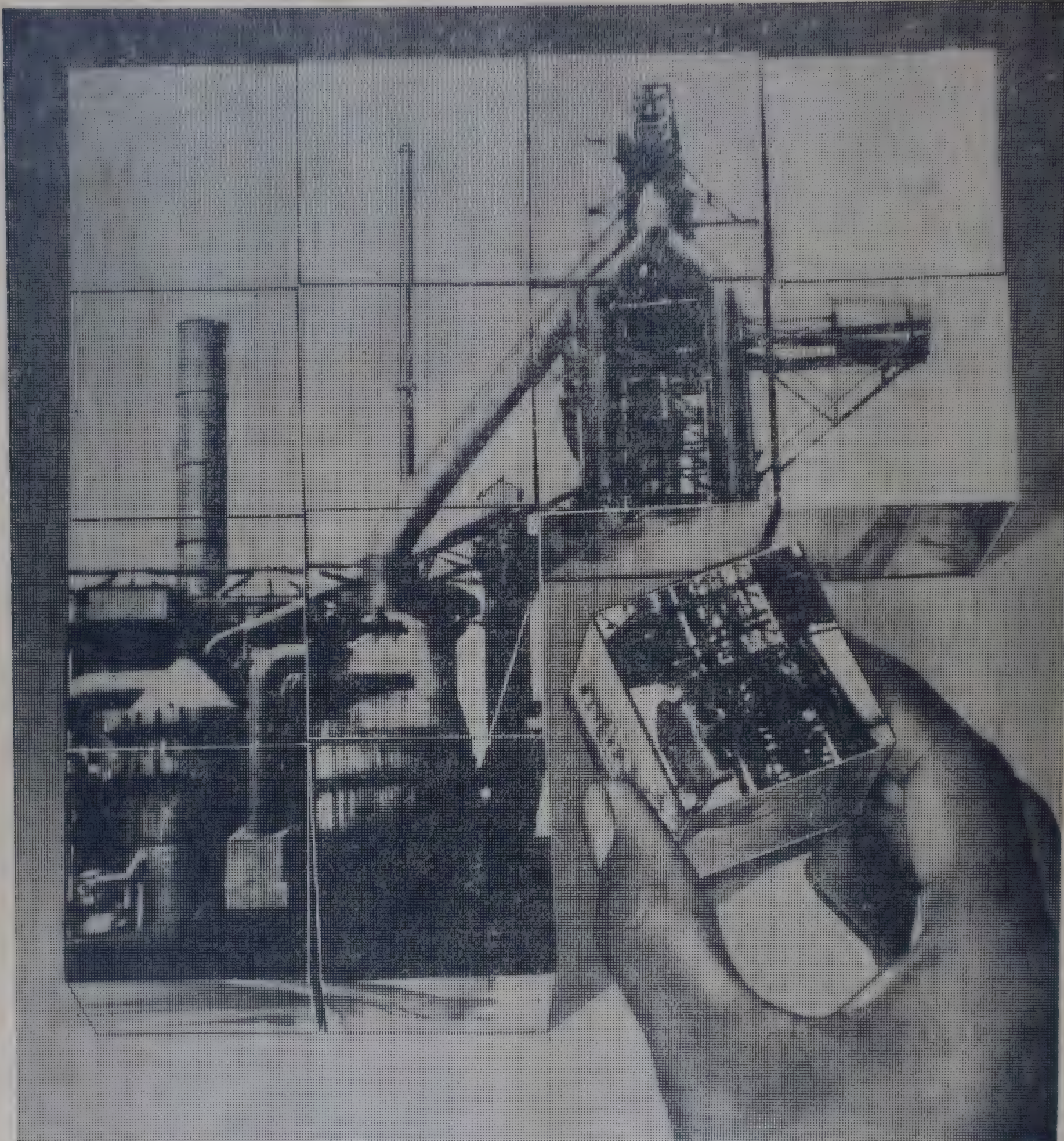
### Towards a Political Economy

The fundamental points to emerge from the discussion so far can be restated as follows. For the poor capitalist economies, the distribution of gains from trade with the socialist world was probably as favourable—if not more—as that in the case of trade with the Western capitalist countries. The socialist countries of Eastern Europe also derived significant benefits from their trade and economic relations with the African, Asian and Latin American nations. Contrary to pronounced objectives, however, trade with the socialist countries has not led to a radical transformation in the patterns of production and trade in the Third World, or to a new international division of labour.

To focus attention on the economic aspects alone, as I have done so far, is to ignore the important politics of the relationship. Formulating a political economy of the interaction between these two groups of countries is no doubt essential, but it is a complex task. This brief section only contributes some thoughts towards it; I hope to develop the theme further in another paper.

The underdeveloped capitalist countries promoted their relationship with the communist world for a variety of reasons. Interestingly enough, economic ideology or political developments within the poor countries exercised relatively little influence. International political developments were far more important. In the early stages of the post-colonial era, several Third World countries sought to exploit cold war rivalries and use relations with the socialist bloc to accelerate the process of decolonisation and assert their national economic independence. Later, it became a method of improving their bargaining position vis-à-vis the Western capitalist





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countries. In fact, the existence of the communist countries on the international scene did add to the bargaining strength of poor nations. This may have been because the socialist countries were an alternative source of technology, imports or finance and an alternative outlet for the traditional exports of Third World countries. Close ties with the communist countries were also valuable for internal political reasons; they enhanced the 'socialist' image of governments which made almost no effort to alleviate poverty but made a great deal of political capital out of the relationship.

The socialist countries, on their part, also attempted to cultivate relations with the poor capitalist nations. In crude political terms, it might be argued that this was motivated by a desire to extend spheres of influence. This factor was no doubt important but there were other reasons as well. The communist countries did consistently support the struggle against colonialism and imperialism in Africa, Asia and Latin America. In this context, nationalist movements were always regarded as a progressive force by the socialist world. However, it is important to remember that nationalist movements were frequently led by the elite, which did not obviously set these countries on the road to socialism. For that reason, among others, the struggle between capitalism and socialism continues in many Third World countries. The attitude of the European socialist countries to this conflict is interesting. They regard the concentration of resources in the hands of the state — a characteristic feature of East European aid — as "...a vital means of counteracting foreign monopoly capital and the sections of the local bourgeoisie oriented towards co-operation with these monopolies. Where the public sector is absent or small the economic development of the new states is usually unstable and becomes dependent on private capitalist elements".<sup>25</sup> Paradoxically enough, strengthening the hands of state capitalism may not have been in the interests of the poor in Third World countries; on the contrary, it probably consolidated the position of the ruling elite. Given the economic and political system in these countries, the outcome was almost inevitable. Yet, to put the problem in perspective, the socialist countries could have done little to alter the politics in poor nations and their presence on the international scene probably did give rise to some advantages

for the underdeveloped world.

The issues outlined in this paper are quite crucial. However, there are many questions that remain unanswered. For instance, is it possible for socialist and capitalist economies trading with one another to derive significant long-term benefits? In what manner, and to what extent, did the experience of the less developed socialist countries differ from that of the countries discussed here? Is an international socialist division of labour possible when, for all practical purposes, the poor countries are an integral part of the world capitalist economy? If not, what is the future of the relationship between the socialist countries and the Third World? Is it likely to be governed largely by developments on the international political scene? Answers to these questions can only emerge from further research.

### Notes

[This paper represents an intermediate stage of research in progress. Critical comments from Ashok Mitra, Suzanne Paine and Frances Stewart have led to several improvements in it. For the errors that remain in the analysis, I am entirely responsible. It is hoped that the essay will stimulate criticism as well as further discussion of the problem.]

- 1 In the last few years, there has also been a rapid expansion in trade between China and the poor capitalist countries. Although China's relationship with the African, Asian and Latin American nations does raise several interesting issues, it is not discussed in this paper. Instead, I shall focus attention on the European socialist countries.

- 2 A recent publication, however, provides some analysis of the problem; see Deepak Nayyar (ed), "Economic Relations between the Socialist Countries and the Third World", a special issue of *World Development*, Oxford, May 1975.

- 3 Cf, "Statistical Review of Trade between Countries Having Different Social and Economic Systems", UNCTAD Secretariat, TD/B/410, Geneva, August 23, 1972, p 6. It should be pointed out that the UNCTAD classification of developing countries also includes Cuba and Yugoslavia. As such, it does not correspond exactly with the category of less developed capitalist countries in Table 1. From our point of view, therefore, these figures may be slightly overestimated but they are still a perfectly reasonable index of the changes in relative shares.

- 4 *Ibid*, p 8.

- 5 During the period of 1971-1973, developing countries absorbed 14.7 per cent of exports from the European socialist countries and were responsible for 10.6 per cent of their imports; calculated from UNCTAD Secretariat document No TD/B/499/Supp 1/Add 1, Geneva, July 22, 1974, p 1.

- 6 The percentage share of the three continents in the socialist bloc's trade with the developing world was as shown in Table A. It should be noted that the relatively high share of Latin America is attributable to trade with Cuba, which is included in the above statistics as part of the Latin American continent.

- 7 Cf, "Trade Relations among Countries Having Different Social and Economic Systems", Report by the UNCTAD Secretariat, TD/112, Geneva January 20, 1972, and V Vassilev, "Policy in the Soviet Bloc

TABLE A

	1960	1965	1970	1972
Africa	30.2	27.3	30.7	30.0
Asia	43.3	40.5	37.7	41.8
Latin America	26.5	32.2	31.6	28.2

Source : UNCTAD Secretariat, calculated from document No TD/B/505/Supp 1 Annex, p 1.

TABLE B

	1954-1960	1961-1965	1966-1970	1971-1972
Africa	933	1735	1566	1240
Asia	2096	1539	2951	1179
Latin America	111	285	394	582
Total	3140	3559	4911	3001



- on Aid to Developing Countries", OECD Development Centre, Paris, 1969. It should be mentioned that trade with Indonesia was important in the Sukarno years, as also with Chile during the Allende regime.
- 8 From 1954 to 1972, the total bilateral aid commitments made by the socialist bloc to the poor capitalist countries were \$ 14,405 million; see UN *Statistical Yearbook* 1973, p 715.
  - 9 Calculated from *ibid*.
  - 10 UN statistics reveal the following trend in bilateral aid commitments by the centrally planned economies to the poor capitalist countries (see Table B).
  - 11 See Robert Mabro, "Egypt's Economic Relations with the Socialist Countries", *World Development*, May 1975.
  - 12 For a detailed discussion, see a study prepared for UNCTAD by the Moscow Institute of Economics of the World Socialist System, "Innovations in the Practice of Trade and Economic Co-operation between the Socialist Countries of Eastern Europe and the Developing Countries", TD/B/238/Rev 1, New York, 1970, pp 8-11.
  - 13 It should be remembered that repayments still involve domestic resource costs. Moreover, the debt servicing burden is reduced, and the capacity to import increased, only if there is an exportable surplus in the economy. Without such a surplus, increased exports to the socialist world could well be at the expense of domestic consumption.
  - 14 See Deepak Nayyar, "India's Trade with the Socialist Countries", *World Development*, May 1975, where it is estimated that less than 15 per cent of India's exports to the European socialist countries were diverted from other markets.
  - 15 Calculated from the UN *Monthly Bulletin of Statistics*; several issues containing data on exports of centrally planned economies.
  - 16 The following sources provide evidence on these countries; (i) on Egypt, Robert Mabro, *op cit*, pp 308-9; (ii) on India, Deepak Nayyar, *op cit*, pp 293-7; (iii) on Pakistan, Michael Kidron, "Pakistan's Trade with Eastern Bloc Countries", New York, 1972, pp 47-54; (iv) on Bangladesh, A R Khan, "Bangladesh's Trade and Economic Relations with the Socialist Countries", *World Development*, May 1975, pp 331-2; and (v) on Tanzania, M A Bienefeld, "Special Gains from Trade with the Socialist Countries: The Case of Tanzania", *World Development*, May 1975, pp 265-6.
  - 17 Very few poor countries have state trading agencies, and even where these exist the bulk of the foreign trade is carried out by private firms and individuals.
  - 18 There is a widely held view that machinery and transport equipment imported from the socialist countries is of relatively inferior quality and, what is more, poor countries may have paid excessively high prices for it. Evidence in support of such a view is extremely hard to find, and wherever statements of this kind are made they are rarely documented. This is because price and quality comparisons for machinery, over a wide range, are well nigh impossible. However, it is worth pointing out that in any market for manufactured goods, low prices are often a substitute for adequate quality. Thus it is unlikely that bilateral agreements lumbered poor countries with poor quality imports that were also overpriced. Clearly, importers in a capitalist economy would not have entered into such transactions.
  - 19 For a detailed discussion, see "Innovations in the Practice of Trade and Economic Co-operation ...", *op cit*, pp 5-8.
  - 20 Socialist aid, like aid from other sources, is frequently tied to the country of origin and to a particular project. Some would argue that this imposes costs on recipients in the Third World and reduces the real resource transfer. However, it must be remembered that repayments are also tied and do not have to be paid in convertible currencies. Therefore, aid and trade cannot be treated as separate issues. The value of development credits extended by the socialist countries depends on the overall terms of trade obtained and not on the prices of aid-financed imports alone.
  - 21 Aid from the Western capitalist world provides a marked contrast, as gross inflows are often maintained only to service past debts.
  - 22 Although one cannot be certain, it is extremely unlikely that socialist countries would have increased their trade with the poor capitalist countries to the extent they did, in the absence of special payments arrangements which eliminated the use of convertible currencies in trade.
  - 23 Cf, "Statistical Review of Trade between Countries having different Social and Economic Systems", UNCTAD Secretariat, TD/B/410, Geneva, August 23, 1972, p 9.
  - 24 India's manufactured exports to the socialist countries of Eastern Europe increased from \$31 million in 1962 to \$268 million in 1972 (calculated from Deepak Nayyar, *op cit*, p 281), while Egypt's exports of manufactures to the socialist bloc rose from \$62 million in 1965 to \$172 million in 1972 (see UNCTAD, "Trade in Manufactures of Developing Countries", 1972 and 1973 Reviews).
  - 25 S Skachkov, "Economic Co-operation of the USSR with Developing Countries", *Social Sciences*, No 3, 1974, USSR Academy of Sciences, Moscow, p 10. The author is Chairman of the State Committee of the Council of Ministers for Foreign Economic Relations.

### Foreign Inward Remittance Payment System

THE Foreign Exchange Dealers' Association of India has evolved a scheme under which a common instrument will be used by all authorised dealers for effecting payment of the rupee proceeds of personal remittances received in India in favour of Indian nationals. At present beneficiaries of such remittances experience considerable delay and expense in obtaining proceeds of remittances from abroad.

The scheme evolved by the Foreign Exchange Dealers' Association of India is known as Foreign Inward Remittance Payment System (FIRPS). When foreign currency remittances are received in India banks will promptly convert foreign currencies of such remittances into Indian Rupees if the remittances are received in favour of Indian nationals. They will arrange expeditious issue of the FIRPS instrument in favour of beneficiaries for the rupee proceeds of the remittances. The instrument will invariably be despatched to beneficiaries by the issuing banks by

registered post. The issuing banks will not collect any charge from beneficiaries in this regard.

The FIRPS instrument will be issued by banks who are authorised to deal in foreign exchange. The instrument, however, is encashable at all scheduled commercial banks, whether authorised to deal in foreign exchange or not. The encashing banks will encash the instrument at par. The encashing bank can obtain reimbursement for the amount of the encashed instrument from any branch of the issuing bank. Encashment commission at the rate of 20 paise for Rs 100 or part thereof will be payable to the encashing bank except where reimbursement is obtained locally.

The FIRPS instrument will be utilised for effecting payment of *personal* remittances only. Remittances in favour of firms, companies Association, etc, cannot, therefore, be paid through this system. The instrument thus cannot be used for effecting payment of business remittances from abroad.



# Theories of Direct Private Foreign Investment and Multinational Behaviour

Sanjaya Lall

*This paper is intended to provide a summary and a synthesis of recent theories of foreign investment in the manufacturing sector and of explanations of the growth of multinational companies (MNCs). Since the field of foreign investment is heavily dominated by MNCs, a realistic explanation of one necessarily serves in great part as an explanation of the other. An attempt is made, wherever possible, to draw a distinction between "multinationals" proper, defined as the very large direct investors which have subsidiaries in several countries, and "other" foreign investors, smaller and less widespread.*

*There is now an immense literature on the causes of foreign investment, especially by MNCs, and a review of this sort must necessarily be selective. This paper concentrates primarily on the economic and managerial aspects (conventionally defined) of the subject, though it also touches upon some wider socio-political implications, and tries to draw out those features which have special relevance to developing countries. The treatment is completely non-mathematical; and no attempt is made in this paper to discuss the effects of MNCs on host countries.*

## I

### Economic Theories of Direct Foreign Exchange

THE 'pure' theory of international trade, in its orthodox neo-classical form, is singularly unhelpful in explaining the growth and causes of foreign investment. It generally assumes competitive factor and commodity markets, two factors of production and identical production functions in different countries, and treats direct investment simply as an undifferentiated part of capital flows which take place in response to differences in interest rates that reflect relative factor scarcities in the countries concerned. While its result accords with the general fact that rich countries, which are presumably 'capital-abundant' in this simple model, invest in poor countries which are 'capital-scarce' (with 'risk' sometimes included as a modifying factor), it hardly provides a satisfactory analysis of direct as opposed to portfolio investment or foreign borrowing, or of the interpenetration of the advanced capitalist countries by each other's firms, or of the transfer of any of the other factors (technology, marketing, control, and so on) which are part of international investment just as much as the transfer of capital.<sup>1</sup>

Recent analyses of foreign investment have, therefore, discarded 'pure' theory and turned to explanation of trade and investment which explicitly take market 'imperfections' into account, and pay great attention to industrial structure, the production and dissemination of technology, the role of product differentiation and marketing, the determinants of merger and concentration generally and to various forms of market power possessed by

large firms, in order to examine the phenomenon. The new approach, which may be labelled the 'oligopoly theory' of direct investment (and trade), is rather eclectic and draws upon such diverse fields of study as theories of the firm, location, monopolistic competition, management behaviour, innovation and exchange instability to produce a comprehensive, if relatively unrigorous, view of the actual process of MNC growth.<sup>2</sup> The essence of the oligopolistic theory is that firms operating across national boundaries and over long distances suffer an *intrinsic disadvantage* (caused by difficulties of communication, linguistic differences, or lack knowledge of local market conditions, laws and officials in foreign countries) which must be *sufficiently offset by some sort of market power* so as to make international investment profitable.<sup>3</sup> In competitive conditions with perfect information, no single firm can, by assumption, exercise any kind of market power, and cannot therefore invest abroad profitably: *it is a necessary condition of direct investment that the investing firm has at least one source of market power (and usually more) not possessed by potential local competitors which do not suffer from the costs of foreign operation.*

The similarity between this sort of explanation of direct foreign investment and those which deal with the *domestic* market structures of advanced economies is immediately obvious. The factors which lead to the emergence of greater concentration in industry, within particular countries — by the processes of the internal growth of firms as well as by mergers and takeovers — and which preserve and strengthen the dominance of particular firms — the barriers

to entry of new competitors — also account, to a large extent, for the international spread of large firms and the growing concentration of international production. The recent work of some economists following Hymer's lead (see, in particular, references to works by Caves, Horst, Baumann and Stevens) has made this almost commonplace in the literature; but it must be noted that the more conventional analyses of foreign investment, based on neo-classical trade theory, wandered for a long time in the sterile reaches of high abstraction without being able to say very much about the actual process of multinational growth. The essential identity between the evolution of internal industrial structures and the export of capital was, of course, analysed much earlier by Marxist thinkers (see the surveys cited earlier), who saw the 'imperialistic' growth of international production by large monopolistic enterprises as the 'highest stage of capitalism'. Some of Hymer's later writings provide an interesting combination of viewpoints between his industrial-organisation approach and his Marxist analysis of the effects of MNCs on developing countries, and show how such an unlikely synthesis can yield extremely useful results.

To return to theories of direct investment, it should be clear at the outset that while the existence of some oligopolistic advantage is a necessary condition for direct investment abroad, it is certainly *not sufficient*. The existence of market power characterises *all* industries in which international investment occurs, but it is also marked on some where it does not. Clearly some sources of market power are more significant in this respect than others; furthermore, even with these sources present there may be reasons for international invest-



ment not to take place at certain times or in certain places. Let us, therefore, first look at the nature of oligopolistic advantages which may be possessed by foreign investors over local ones (Step 1), and then see why they may lead to foreign investment rather than to other forms of their exploitation such as exporting (Step 2) or separate sale of these advantages (Step 3).

#### SOURCES OF MARKET POWER

The sources of market power, 'monopolistic advantage' in Kindleberger's terms, may explain two things: first, why a foreign firm invests rather than a local one, and second, why (in appropriate cases) a large foreign firm — a multinational — invests rather than a small foreign one. Clearly such advantages are more significant the more monopolistic the industry concerned and in general, they may be taken to comprise the reasons for the growing predominance of MNCs over all other potential investors in all areas of their operation. Some sources of market power are more important as *permissive* factors in overseas investment than *actively causal* ones, while some others emerge as a *consequence* of expansion and serve to reinforce the earlier advantages. We shall try to indicate in the following list which, in our view, fall into which of these broad categories.

(a) *Capital*: The foreign investor (or MNC) may possess a larger or cheaper source of capital than a local (or smaller foreign) competitor, by virtue of the financial strength of the parent company. There can be three main reasons for this; the parent may possess large internal resources for which its opportunity cost in terms of alternative outlets may be quite low; it may have access to capital markets in developed countries (both equity and loan) which are not open to, or at least more costly for, its competitors; and it may get favourable terms or priority in raising capital locally, because of its established credit rating or because there are branches of multinational banks operating locally which have prior relations with the parent firm. While this sort of advantage has been noted as an important factor in the expansion of US MNCs, especially in Europe (access to local and Eurodollar markets becoming particularly significant after the imposition of controls by the US government on capital flows abroad), the availability of finance can serve mainly as a permissive factor in foreign investment. It is unlikely that, in the absence of other sources of market power, the mere access to cheaper

or more finance can act as an inducement to direct, as opposed to purely financial (portfolio) investment, though theoretically it is possible that by itself this may facilitate expansion *via* takeover or merger. Even a takeover, however, is likely to require the existence of some other advantage besides finance, like greater risk-taking propensity, or economies of scale by merging, or technological/marketing economies, and so on.<sup>4</sup> Conglomerate merges between firms in completely unrelated industries are a possible exception, but such mergers are still comparatively rare in the field of international investment.<sup>5</sup>

(b) *Exchange risk*: It has been pointed out by Aliber that because of the existence of exchange risk and the relative hardness of the currencies of capital exporting countries "the pattern of direct investment reflects that source-country firms capitalise the same stream of expected earnings at a higher rate than host-country firms", partly because "the market demands a premium for bearing uncertainty about exchange risk" and partly because "the market does not attach a currency premium to the foreign income of the source-country firm".<sup>6</sup> However valid such an explanation may be for direct investment in developed countries (which is where Aliber intends it to apply), it does not seem to be particularly relevant to that in LDCs with highly imperfect or non-existent capital markets and with heavily regulated foreign exchanges. In so far as it boils down to a superiority of the MNC to raise local equity capital, it is useful as an adjunct to item (a), but even for developed countries it is a particularly incomplete and unsatisfactory explanation: it does not explain the pattern of cross-penetration of the countries by each others' MNCs, and it fails to account for the continued growth of US and UK MNCs in view of the weakness of the dollar and the pound in recent years.

(c) *Management*: The MNC may have the advantage of superior management, which may take the form either of greater efficiency of operation as compared to a similar operation performed by a local firm, or of a greater entrepreneurial ability to take risks, or to seek and carry out viable ventures in the uncertain world of business. This advantage may arise from the greater experience of foreign or MNC managers, or better training, education or higher standards of recruitment; in the context of LDCs, it may reflect the historical and cultural fact that most of them simply do not have an entrepre-

neurial/managerial class in industry. It may also arise from different organisational forms adopted by the very large MNCs which facilitate efficient and rapid decision-making across diverse and widespread units (considered in more detail below). It is difficult to know how to classify such a diffuse factor. Certain types of 'entrepreneurial' ability (in the Schumpeterian sense) are clearly causal factors in domestic and foreign expansion: a uniquely dynamic business leader, or one with a major technological innovation to exploit, may by himself lead a firm to greater success than someone else. Certain types of organisational and managerial efficiency which are said to characterise MNCs (though there is an element of mythology in this) may, on the other hand, be permissive or consequential factors in growth, and not cause it, though their existence may well give an additional advantage to MNCs over other firms.

(d) *Technology*: The MNC may possess superior technology as compared to a domestic or small foreign firm. By 'technology' we mean, not the knowledge of the relevant sciences, which may be available in some disembodied form more or less equally to all countries, but the ability to translate this knowledge into practical, commercial use. It is obvious that MNCs have in many industries a superiority in 'technology' in this sense;<sup>7</sup> indeed, most countries want their presence precisely in order to obtain this particular superiority.

It is by now well known that the production of technology, as measured by R and D expenditures, is highly concentrated in the developed countries, especially the US, and within these is highly concentrated in a few firms, most of them multinational. It is these firms which are responsible for producing the bulk of marketable innovations in the non-socialist world and it is they who protect their innovations by taking out the vast majority of patents in almost all countries, developed or otherwise,<sup>8</sup> or by various practices keep the innovations secret or unusable by competitors. The key word is 'marketable': the highly innovative firms do not merely have to do a great deal of R and D, they must do it for maximising their output of saleable and profitable products. This is clear enough, but its implications are less so. The vast bulk of R and D expenditures by industry goes into 'applied research and development'; in the US, for instance, less than 3 per cent of total R and D spending,



including Federal government financed expenditures, went into 'basic' research (defined as research without a practical application in view) in 1973.<sup>9</sup> The greater proportion of the remainder was for 'development'<sup>10</sup> (with the Federal government providing about 40 per cent of the funds in 1973, mostly in the aircraft and electrical equipment industries).

The distinction between 'applied' and 'development' research is hard to draw, and it is not useful for our purposes to pursue it here. What is worth noting, at the risk of some oversimplification, is that such research and development efforts, taken broadly, serve three different functions in the framework of oligopolistic competition which characterises international investment.

(i) Discovering *new processes* (more efficient methods of doing existing jobs) and *new products* (more efficient ways of meeting market needs): This is the normal meaning of 'technical progress' in conventional economic usage, and corresponds to the Marxist conception of 'raising the productive forces' of society.<sup>11</sup> It is also the sense in which 'technology' is generally used (with implicit approval) when the role of MNCs in the 'transfer of technology' to LDCs, or the role of technology in promoting economic growth, are considered. In terms of a firm's behaviour, it may be classified as 'offensive' innovation strategy<sup>12</sup> and may involve a substantial amount of internal 'basic' research, a close monitoring of basic research done in the relevant scientific establishments and a considerable ability to undertake design-engineering and development ('problem solving') work to bring new scientific ideas to productive application.<sup>13</sup>

(ii) Product differentiation: This covers the introduction of slight variations (in presentation, appearance and performance) in products manufactured by a firm itself or by its competitors.<sup>14</sup> As manufacturing industry grows more oligopolistic, and especially when particular technologies 'mature', the role of such 'marketing-orientated' R and D becomes more and more important. It must be admitted that it is often difficult to distinguish between new and differentiated products or processes, and a series of marginal changes may sometimes add up to an important innovation in the long run: a great deal depends on the criteria used for judging 'novelty' in relation to need, and grave conceptual problems arise when the 'need' itself is created by the new product. However, most analysts of in-

novation, as well as businessmen themselves, do draw this distinction, and Freeman notes that:

Several surveys ... have shown that even in the United States, most industrial R and D is 'defensive' in character concerned primarily with short term horizons and 'improvements' ... Defensive R and D is probably typical [of] most oligopolistic markets and is closely linked with product differentiation.<sup>15</sup>

Thus, several industries with heavy R and D expenditures tend to concentrate on product differentiation R and D, automobiles being the best example, while others, like pharmaceuticals, engage in differentiation to extract the maximum benefit from basic R and D and genuine innovations.<sup>16</sup> A recent article in *Business Week* (1976 a) notes that, with increasing government regulation, rising costs, scarce capital and "the concentration of products into larger and fewer companies", US research efforts, even in highly technological industries, has become more 'defensive' relying more heavily on 'marketing innovation' and (low risk) differentiation of existing products. While a good understanding of market conditions and a close integration between the research and marketing departments is crucial to the commercial success of any innovation, the relative importance of of these two functions varies from industry to industry, and within each industry over time with the evolution of market structure and the stage of technological maturity.<sup>17</sup> It is arguable that marketing-orientated R and D is extremely significant and growing more so. It is important, however, to note that the *normal usage of 'technology',<sup>18</sup> masks this vital difference between genuine innovation and product differentiation*, a difference which, as we shall argue later, is of particular relevance to understanding the effects of MNCs on host LDCs.

(iii) Various support activities: A part of the expenditure on R and D does not fall into either of the above categories, and can only be classified as 'support' activity for other innovation. This comprises some forms of market research not undertaken by the marketing departments proper (especially in high-technology capital and intermediate goods industries); 'scouting' the R and D work of rivals and buying up the results of research done by other (generally small) firms;<sup>19</sup> and taking out patents internationally (though this is not a research activity in a direct sense).

What then are the technological advantages of MNCs over other firms? We

may distinguish five such advantages. First, where the minimum scale of R and D required for successful innovation is very high, only a very large firm will be able to undertake it. Second, where the technological threshold as such is not high, but a very extensive marketing framework is needed to profitably sustain a stream of innovations, large size and widespread outlets will be a vital advantage.<sup>20</sup> This is so not only to spread the fixed costs of innovation over a broader sales base, but also to test more ideas, to promote and market innovations more successfully and to spread risks more widely. Third, where continuing R and D needs outside financial support, it is the very large firms which are better able to attract government and private finance. Fourth, because of the expense of taking out and defending patents internationally, it is the MNCs who are most protected by the patent system (though recent US Department of Justice rulings on IBM and Xerox show that the very largest firms can be successfully attacked by smaller—but still very large—MNCs).<sup>21</sup> Fifth, where the defence of a technological oligopoly necessitates (as in many 'mature' oligopolies) the use of restrictive practices, such as pricing conventions, cartels, information swaps and market allocations, it is again the largest firms which can benefit from such arrangements.<sup>22</sup>

Given that technology in a broad sense is one of the prime determinants of the success and growth of capitalist enterprises, and that technological innovation and size appear to interact such a way as to lead to still greater size and concentration,<sup>23</sup> it should be clear why this factor constitutes *one of the prime causal forces* behind the growth of international production. Indeed, a number of empirical studies confirm the vital role of technology in the growth of multinationals, both by new investments and by takeover, and in the growth of the market power of large oligopolistic firms.<sup>24</sup> This is not to assert that technology is the only, or even the predominant factor; on the contrary, it is argued below that marketing may be equally important. Nor is it to deny that in a number of instances—particularly low technology or mature industries with undifferentiated products, as well as some technologically 'new' industries where the market structure has not yet stabilised on oligopolistic lines, like electronics—MNCs do not go in for much technological innovation; indeed, in many such industries the role of multinationals is mini-



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mal and foreign investment may be relatively unimportant. It is nevertheless valid that the growth of technology offers one of the major advantages to MNCs in their expansion and also provides one of the strongest pressures for firms to grow larger, gain more market power and spread their operations more widely.

(e) *Marketing*: The role of marketing is absolutely vital to international investment, and constitutes a source of market power perhaps even greater than that of technology. 'Marketing' has, like technology, a number of functions:

(i) Market research — to gain an understanding of buyers' needs as they evolve in various markets; and (ii) Advertising and Promotion — the imparting of information to buyers and the creation of demand for particular products or brands.

These two functions, need fulfilment and need creation, and are distinct though intermixed: advertising and product differentiation may serve existing needs and evoke or create new and valuable needs, enriching human experience; or they may commercially exploit self-created desires, nuisances, fears or dangers (for the removal of which the customer is charged); the line is practically impossible to draw. The effectiveness of advertising and promotion in creating and maintaining market power is hardly in doubt.<sup>25</sup> Its special place in the field of foreign investment has been noted by several of the authors cited previously, and it is becoming obvious that where marketing can promote the brands of particular firms successfully, regardless of the technological intensity of the industry<sup>26</sup> and the innovative prowess of those firms, the market power created serves as a powerful inducement to international expansion.<sup>27</sup> As with R and D, there are 'thresholds' of marketing efforts which can be out of reach of small firms, and the benefits of large-scale advertising spill over into several markets even before MNCs have set up production facilities. The very nature of oligopolistic competition, with product differentiation and non-price competition, is crucially dependent on the system of powerful and sophisticated marketing. 'Innovation' could not succeed without promotion, and promotion could not succeed without 'new' or 'different' products. And both work towards concentration and internationalisation.

(iii) *Distribution* — arrangements for getting products efficiently to their

markets, for distributing them to wholesalers and retailers, for maintaining adequate stocks, and so on (similarly for buying inputs). This can, for obvious reasons, redound to the benefit of larger firms, or firms with multiplant operations,<sup>28</sup> though it is more likely to serve as a consequential and cumulative benefit of multinational expansion than a causative factor.

(f) *Access to Raw Materials*: Particular foreign firms may have privileged access to raw materials or minerals, by virtue of their control (i) over the final markets or the transportation (generally shipping) of the product (as with some agricultural products); (ii) over processing (vertically integrated mineral and food processing); or (iii) over the production of the material itself (plantations and mines). This sort of market power can derive from historical reasons (a development of privileges granted during colonial rule), from technological ones, (with processing and mining becoming more complex and capital intensive), from financial ones, (with the minimum capital requirement of new projects, especially in mining, becoming extremely large), or from marketing ones (with final product markets being dominated by particular brand names or retail chains). In most cases, at least as far as manufacturing is concerned, this sort of advantage can be traced to one or more of the others discussed above. The quest for stability in oligopolistic conditions may, however, lead the cumulative building up of such market power to become a "pathological condition ... Companies may feel safer with assured access to sources of inputs and to outlets for products. In these circumstances the industry will shift from numerous firms which are small and competitive at each stage to one of a few large, vertically integrated concerns. Once started, the process acquires momentum".<sup>29</sup>

(g) *Economies of Scale*: The literature on barriers to competition has always noted economies of scale as an important source of the market power of large firms. Its relevance to international investment is clear: if certain facilities enjoy scale economies, this works to the advantage of those firms which have the finance and expertise to set up and operate such facilities. We should however note two points. First, economies of scale, either of the 'classical' type arising simply from the size of plant or of the more recent type arising (in the case of multiproduct plants in oligopolistic differen-

tiated-product industries) from longer production runs,<sup>30</sup> are available to *all* firms which can reach the requisite size. They do not constitute a special source of market power for foreign firms or MNCs unless large size can only be attained by having access to some *other* special advantage, like finance, technology or marketing. Thus, economies of scale as such can only serve as a permissive (and cumulative) factor in overseas expansion.

Second, the tendency towards increasing concentration and larger firms in many areas of manufacturing industry within developed countries has not in fact been accompanied by larger and plants.<sup>31</sup> Firms here have grown more by using multiplant operation than by increasing the size of plants, their strength deriving less from the technical advantages of large plants than from other factors which can be centralised, like R and D, marketing, finance and managerial expertise, and which do yield economies to large firms. Economies of size of firm do constitute an important dynamic advantage to large and growing firms, but this is really a self-reinforcing combination of various other 'advantages' rather than a separate 'advantage' on its own.

(h) *Bargaining and Political Power*: Many MNCs may be better able to extract 'concessions' and favourable terms from host governments than local firms, for two sets of reasons. First, that they possess some scarce resource, such as capital or technology, which local firms do not; this depends on their having some of the advantages discussed above. Second, they may have greater political leverage, either because of pressure exerted by the government of their home country, (by means of 'aid', military or otherwise, diplomatic and political links, etc) or because of pressure exerted by interested groups of officials or businessmen within the country.

We must not, however, put too much weight on this factor as an explanation of the *normal* process of MNC expansion, as many exponents of theories of 'neo-imperialism' are prone to do, since in fact home governments step in to help *particular* firms only in exceptional cases like expropriation or a threat to vital supplies. The role of political factors is much more subtle. It is to "make the world safe for free enterprise", to secure the goodwill of the host government, perhaps by paying the price of local participation, and to ensure that



'subversive' and unfavourable policy influences are minimised. This is not generally an exercise in naked power politics but a diffuse, shifting and complex interplay of *internal and external forces*, with different effects in different places, yet tending over a period of time to produce a powerful socio-political elite supporting 'free' enterprise.<sup>32</sup>

All these sources of market power have, we must stress, a *cumulative and dynamic* effect with the growth of MNCs, which is in itself a considerable advantage to them. Success breeds success in big business, and there are several factors which may enhance firms' market power over a period of time simply through the process of expansion. First, as Penrose (1956, 1959) has pointed out, the internal resources of a firm are just as important to its growth as external ones. Thus, a firm which has grown rapidly within a country already possesses the sort of experience, management and team spirit which can enable it to expand abroad, and this sort of advantage may not, contrary to some orthodox theories of the firm, diminish with size. Second, there may be financial and technological advantages of widespread integration over several countries, permitting the tapping of different markets, the quick internal transfer of funds and know-how, and the avoidance of heavy taxes or official restrictions.<sup>33</sup> Third, there may be diminishing costs of entering new markets after a certain level, with increasing knowledge, bargaining power, confidence, 'fall-out' effects of advertising, and the spreading of risk.<sup>34</sup> We need not dwell very long on these points, since the case is fairly obvious and well-established.

To summarise the oligopolistic theory of direct investment so far, manufacturing investment abroad requires the possession by the investing firm of some source of market power to offset the disadvantage of foreign operations. There are many sources of such market power, but the decisive ones, which in fact determine why some industries and firms go multinational while others (despite being oligopolistic, or having access to cheap capital or skilled management) do not, are *marketing and technology*. Other advantages merely add to these basic ones, they cannot displace them. And *superiority in marketing seems to be an even more fundamental precondition for multinational expansion than superiority in technology*, despite the strong stress laid on technology in the

literature on MNCs: without a marketing advantage, high technology industries may not expand production abroad, while with such an advantage, even very low technology industries may go multinational.<sup>35</sup>

This provides the first step in the explanation of direct foreign investment. It shows what permits certain firms to grow and invest internationally; but it does not show why the sources of market power possessed by these firms are exploited by direct investment rather than by exporting the product (Step 2) or by selling the sources of market power themselves (Step 3). Let us consider these now.

#### ADVANTAGE OF DIRECT INVESTMENT OVER EXPORTING

It may be argued that if all the oligopolistic advantages of large firms showed up in lower prices, better products or a larger captive demand, these firms should be able to exploit such advantages by exporting rather than by undertaking the trouble and risk of organising manufacturing operations abroad. Indeed, many large firms, both with and without multinational operations, are major exporters from their home countries: what then affects the choice between these alternatives? We can think of five major factors:

(a) *Cost of Production*: A combination of a modified theory of comparative advantage (to allow for imperfect competition and partial factor mobility across frontiers) in the field of international trade, and that of location in industrial economics, provides the most obvious explanation of why firms from one country should choose to establish plants in another. Given the exchange rate, the techniques of production, the costs of transportation and of transferring technology, and a range of different costs for factors of production, clearly some countries will have an economic advantage over others as manufacturing bases. If MNCs are assumed to have a truly 'global perspective', take investment decisions mainly on rational cost calculations and not be inhibited by government restrictions, they can also be assumed to allocate their resources in a commercially efficient manner between different countries.<sup>36</sup> Whether or not this also promotes the *welfare* of the societies concerned is a different matter; it must only be noted at this stage that business and social welfare are identical only under special and restrictive assumptions (too often taken for granted in conventional theory, especially in the analysis of foreign investment).

In fact, the production cost explanation of foreign direct investment accounts for a relatively small, but probably growing, proportion of MNC investment in LDCs. It is certainly the explanation for the growth of 'sourcing' activities of MNCs, which have been noted in the context of both developed and less-developed areas.<sup>37</sup> 'Sourcing' refers to the production and interchange of specific components, processes and services by an MNC in different areas so as to minimise costs of the total process; the dispersion of IBM units in Europe and the location of electronic plants in Hong Kong, Taiwan or Mexico provide excellent examples.<sup>38</sup> It also accounts for certain export-orientated industries based in low-wage areas, in which entire facilities are transplanted to LDCs (particularly in special duty free zones set aside for such activity) and the output is transported to high-cost consuming countries. This is mainly the case with certain low technology industries like clothing, sports equipment or footwear, and is more the preserve of small foreign investors or buying groups (made up of retailers) than the real multinational manufacturer. Taken together, however, such investments are still not very large in less developed areas. Production and transportation costs have a larger part to play in explaining the growth of MNCs in the developed world, though their influence is difficult to disentangle from those of other factors mentioned below, and varies with the state of competition, the maturity of the technology and the behaviour of other firms.<sup>39</sup>

(b) *Government Policy*: One of the most important reasons (though neither a necessary nor a sufficient condition) for undertaking foreign investment is the existence or threat of tariffs or direct and indirect restrictions on imports by the host country. It is generally accepted that the import-substitution strategies followed by most LDCs have been largely responsible for inducing foreign firms, which used to export to them from their home countries, to set up manufacturing facilities there. For such investment to occur, the conditions laid down in Step 1 must have been fulfilled: the investing firm must, in other words, have had some advantage over potential local competition. As foreign firms did not usually have to compete in open world markets, however, they may have operated, or at least sold their output, at costs and prices above those obtaining at home, the exact extent of the excess determined by the amount of protection given



by the host governments.

While the threat of restriction or discrimination, and so the loss of a market, is a prime cause in moving firms abroad, we have to bring in two additional factors to explain, first, why some firms invest abroad *without* such a threat and in countries without a particular production cost advantage, and second, why some relative open markets tend to attract a host of MNCs with investments of uneconomical size rather than a few with more 'rational' investment behaviour.

(c) *Importance of Marketing*: Many MNCs expand abroad in relatively unprotected economies (MNCs from developed countries investing in other developed areas) not just in order to exploit cost advantages, but also in order to service the local market better. Since it is precisely the marketing factor which constitutes the chief commercial advantage of multinational firms, it is only natural that this factor should also prompt them to exploit and protect it to the full. We should, therefore, expect to find that in industries where product differentiation, rapid model changes, advertising and retailing were of great significance, the leading firms would do their utmost to satisfy *local* tastes and requirements. In many industries, especially those with mature technology, this calls for local manufacturing facilities rather than simply export outlets; rightly or wrongly, many firms feel that managers of plants within a particular geographical or cultural area will respond better to market conditions than those stationed outside it.

The distance and difference in perspective of the home country is, of course, also relevant: for example, US automobile manufacturers, with a completely different pattern of demand for cars (at least until recently), may feel it imperative to invest in England to produce cars suitable to English tastes (and take advantage of lower costs), while German manufacturers (despite higher wage costs) may not, and Japanese ones, making more or less suitable cars, may be able, despite the geographical distance, to conquer the marketing barrier by aggressive and highly developed marketing tactics. Industries with very high R and D content, like the aircraft industry, will not embark on foreign investments because the advantage of local marketing compared with home-base marketing is relatively small to the advantage yielded by new technology. The decision whether to export or to invest will depend on the relative weights attached, on the one

hand, to the costs of controlling and co-ordinating a network of affiliates and, on the other hand, the costs of being out of touch with the market and incurring increasing marketing costs in exporting as compared with local production.

(d) *Oligopolistic Reaction*: Even if none of the above factors is in existence, the move abroad of one particular firm in an oligopoly may prompt its rivals to do the same.<sup>40</sup> The very structure of oligopolistic competition and equilibrium is such that none of the participants can afford to ignore what the other is doing; a move abroad may be, and usually is, interpreted as a threat to the *status quo* which must be countered by similar moves by the others. The speed of the reaction will differ from industry to industry, depending on the extent of concentration, the stability of the oligopoly, and the product range. Knickerbocker suggests that oligopolistic reaction increases with the level of concentration, except at very high levels where the structure is more stable, and decreases with the diversity of product. He also finds that "the few leaders of each industry, those that react swiftly to one another's moves, tend to ignore scale considerations when they invest abroad", which has important implications for their productive efficiency, and that "the profitability of overseas manufacturing industry is positively correlated to entry concentration... particularly in the case of the very prompt interaction".<sup>41</sup>

Thus, while foreign investment may prove both feasible and profitable *ex post facto*, very often the move is not made until one oligopolist sees fit to start the ball rolling. The first move may be prompted by government action or for some other reason, but the subsequent pattern cannot be interpreted in terms of individual firm-profit-maximising behaviour, independent of the actions of rival firms. This accords well with some recent Marxist analyses of international capitalism as a growing worldwide battle of competing giant firms, forced to continually extend the scope of their activity.<sup>42</sup> It also lends some support, though Knickerbocker himself is careful to specify offsetting influences, to Hymer and Rowthorn's conclusion that "the cross penetration implied by the simple oligopoly model we have just described has as its *logical* end a stable equilibrium where all the dominant oligopolists have a similar worldwide distribution of sales".<sup>43</sup>

(e) *Product Cycle*: The 'product cycle' model, long familiar to business

schools and introduced to academic economists by Hirsch and Vernon,<sup>44</sup> provides a particular explanation of how the various factors mentioned above interact over a period of time to determine production, export and foreign investment patterns of oligopolistic enterprises. While this model does not introduce a new factor into our discussion, it is worth considering separately because of the special *sequence* it postulates, and of the way in which it combines, and assigns varying roles to, technology, production costs and marketing factors.

The first stage of the model begins when an innovation is introduced. It is argued that new products will be invented, produced and sold in countries with the highest incomes and skills (mainly the US). The *invention* and *selling* of new products and processes in rich countries is easy enough to understand: these countries have the financial, organisational and intellectual resources to undertake the requisite research (the 'supply' exists), and they have large numbers of consumers with high incomes and adventurous tastes to test new products on and the greatest pressures of competition and rising wage costs or scarce materials to spur innovation (the 'demand' for innovations is high). The *production* of new commodities in these high-cost countries needs more explanation. After all, the new techniques could be used (assuming international investment were unhindered) in more economical locations to sell in these very markets. Two reasons for producing near the markets are advanced. First, new products are not very price-sensitive, and the temporary technological monopoly which the innovating firm enjoys (perhaps with the help of patents) can enable it to initially disregard such cost considerations. Second, and perhaps more important, the need exists to co-ordinate the production process (especially in its 'teething' stages) with the R and D function on the one hand, and with the marketing function (the need to adapt production specifications quickly) on the other.<sup>45</sup> Clearly this reasoning applies best to cases where there is a *major* technological change.<sup>46</sup> If the 'innovation' is minor, of a product-differentiating type within an established technology, the need to couple production geographically with the scientific and marketing departments is less significant (the model does, in fact, perform best in explaining the rise and maturing of major changes).

If the product is successful in the



rich markets, production expands, new markets are cultivated and exports develop: this is the second stage of the cycle. In this stage the innovator still has a technological lead, but competitors are attracted by its success to work on imitations or to develop similar products. The third stage commences when sufficient competition has developed, and the technology has become standardised enough for cost and local-marketing considerations to become important. The innovating firm then seeks to maintain its profits by making more intense marketing efforts (both by promotion and by differentiating its original product) and by investing abroad in cheaper locations and nearer to foreign markets, so exploiting its technological rents to the utmost. Production shifts in location down the income scale, say from the US to Europe, and from Europe to LDCs, until the product is 'mature' and any rents that accrue arise from marketing rather than technological advantages. At this stage, the final and fourth, the LDC may be used as a base to export back to more developed countries, and the product may be manufactured by several firms besides the MNC originator. The importance of marketing in both *realising* the rents before maturity as well as in *maintaining* profitability and large market shares after maturity is vital, but its role relative to technology increases as the product matures, and market dominance may shift over the cycle from firms which lead in innovation to those that lead in marketing.

The product cycle model was never intended to serve as a *complete* explanation of trade and investment patterns, and Vernon himself says later that "the model is losing some of its relevance for those enterprises that have long since acquired a global scanning capacity and a global habit of mind".<sup>47</sup> It is most useful in understanding some *initial* moves of MNCs abroad following upon major innovations; it is less so in explaining government-policy or oligopoly-induced moves, in explaining the new pattern of 'sourcing' investment, or in accounting for the spread of MNCs which have little technological advantage or are not particularly innovative. However, as long as the basic postulates of the model — innovation in high income areas sustained and spread by world-wide cost considerations and marketing — are valid, as they certainly are, it is valuable in understanding some crucial forces in MNC expansion: the importance of maintaining monopolistic leads, the changing roles over the cycle of technology and marketing, the nature

of oligopolistic rivalry, and the timing of introduction of new products and techniques into LDCs.

#### ADVANTAGES OF DIRECT INVESTMENT OVER LICENSING

A firm possessing a particular advantage could exploit it by selling or renting that advantage by itself, without the paraphernalia of direct investment. It could license rather than export or set up subsidiaries — 'licensing' being used broadly to denote the sale of technology, brand names, patents, management services or other similar assets. In many cases it is clearly preferable for the firms to license, since there does exist a brisk trade in technology, brand names and other services, both within developed countries and between developed and less-developed ones (in this context a foreign 'investment' with a very small, non-controlling, foreign equity participation may be counted as a licensing agreement rather than direct investment proper).

There are a number of factors which influence the choice between direct investment and licensing, such as the size of the market, the riskiness of investment, the secrecy and novelty of the technology, the threat to other markets from licensing, the policy of the host government, the management and strategy of the firm, the industrial market structure and the range of technologies and products involved.<sup>48</sup> In general, the more attractive and (politically) stable the market, the newer and more tightly controlled the technology involved, the larger and more internationally involved the firm in question, the more broadly based its sources of market power, and the lower the 'absorptive' capacity of the potential licensee for the assets to be transferred, the more will direct investment be preferred over licensing. On the other hand, the more widely diffused the technology, the smaller and riskier the market, the more inexperienced, risk-averse or nationally-orientated the firm, the more specific its particular 'advantage' and the more capable the potential licensee, the more will licensing be preferred over direct investment. This is a terse and simplified description of a complex situation, and many intermediate positions are possible between investment in wholly-owned subsidiaries and licensing to unrelated firms, but the factors just mentioned cover the most significant determinants of this sort of choice. Why is this?

Where the first group of factors is relevant, the rents arising from exploiting the advantages of a promis-

ing market *via* direct investment (or the costs and risks involved in doing so) are likely to be far higher (lower) than *via* licensing. In many LDCs the possibility of licensing advanced technology to a local enterprise simply may not exist, but even if it did, an established multinational firm will be extremely loth to sell new and secret technology for licence fee. It will, by doing so, not only threaten its future profitability elsewhere, but will also not be able to profit from its marketing and other (financial and organisational) sources of market power. The oligopolistic dominance of MNCs results precisely from their ability to *combine* several advantages into one profitable 'package'. A licensee is likely to want only one or two elements of such a package: thus, the fee it is prepared to pay, based on the expected returns to these elements, can never match the profits that the licensor can expect to earn itself on the whole combination. Once the package exists, moreover the marginal cost of using it in a new area is relatively low, and can be kept to a minimum by the MNC changing its major components as little as possible. The marginal cost, in terms of profits forgone, of licensing is, however, likely to be very high.<sup>49</sup> Where the second set of factors is applicable, we are more likely to find MNCs licensing some (probably older) technology, or small firms being active in selling technology or other specialised services, or large firms with a specific asset (like Coca-Cola) selling it widely for royalties.

The matter is not just one of the preferences of the MNCs. Many of the advantages of MNCs *cannot* in fact be sold to other firms, either because they are inherent to the organisation or because they are so diffuse that they are impossible to define, value and transfer. Its managerial and organisational capabilities, the experience and spirit of its executives, its standing in financial markets, or its contacts with various officials and other firms, can hardly be sold to outside firms, even if the MNC concerned was willing to co-operate. Moreover, given that many of these advantages grow *cumulatively* with size and international expansion, successful MNCs would want to internalise their benefits rather than dissipate them by licensing. It is only when particular licences do not impinge on the profitability of the firm as a whole (as with selling old or peripheral technology, undertaking management contracts, or subcontracting particular processes without losing control of secret know-how), or when host government policy



makes it effectively impossible to profit from a direct investment package (like the Soviet Union's purchase of a Fiat plant), that an MNC may prefer to sell a licence.<sup>50</sup>

## II

### Motivational Aspects of MNC Behaviour

Some of the main motivating forces of overseas expansion — the oligopolistic structure of industry and the need to exploit technological/marketing rents — have been considered already and need not be mentioned again; here we shall only discuss briefly some of the other factors which are seen by the firms themselves, or attributed to them, to attract their direct investment. There are two main ways in which this question has been approached — the survey method, relying on answers given by the executives of the investing firms, and the econometric method, using statistical techniques on available data to determine the most important factors. A large number of studies have been conducted along both lines, and have tested a variety of explanatory variables, mainly for US enterprises.<sup>51</sup>

The survey approach seems to suggest that the most important considerations affecting investment decisions are the host governments' attitudes, political stability in the host country, the prospects of market growth and the threat to established markets. Different surveys attach different weights to these factors, as is only to be expected, but they all agree that such factors as cost considerations, threat of local competition, tax incentives or short-term strategic gains are of relatively minor significance. The dangers posed by threats of political action, expropriation or arbitrary changes in ownership or remittance policies, and lengthy bureaucratic procedures are on the other hand, significant deterrents to investment in particular areas. There is little doubt that MNCs prefer a stable if somewhat restrictive environment to a freer but unstable one; if MNCs are, as Galbraith (1967) so forcefully argues, dependent for their survival on long-term planning and control of their environment, certainly in the context of their expansion in LDCs they would aim for predictability and reject unpredictable environments.<sup>52</sup> Thus, MNC investment in joint ventures and technology sales are increasing to various socialist countries, which offer clear and firm conditions (and no threat of nationalisation!), but often stop to countries which are ideologically less alien but show marked signs of political trouble.

Some MNCs, especially highly technological ones, however, prefer not to enter countries where a sharing of ownership is required; this is discussed in the following section.

The econometric approach has two branches — one that investigates the behaviour of individual firms and one that studies general investment patterns. The former has tested for the significance for such variables suggested by the theory of the firm as liquidity, profitability, risk, capital-stock adjustment, diversification, or maximisation of market value, as well as for variables peculiar to the emerging MNC phenomenon, such as exchange-risk, international tax differences and the 'investment climate'. The outcome is not at all clear, since different variables appear to perform well in different tests; the general impression conveyed is that the foreign investment decision is governed by a variety of factors, of which the most important are growth of sales and some measure of profitability (perhaps adjusted for risk and tax differentials) or of maximisation of the firm's market value.<sup>53</sup> Liquidity does not show up as a particularly important variable, in survey or econometric studies, except as a constraint in particular cases; it sometimes acts as an inducement to the expansion of affiliates through the availability of reinvestible profits. The more general econometric tests of investment flows, mostly studying the patterns of US investment in the EEC, suggest that the growth of the recipient countries' national income has been the strongest attraction to foreign capital, with profitability, tariffs, and the formation of the Common Market, being relatively less significant.

The best survey of these various studies is by Dunning, who also points out the intrinsic shortcomings of such exercises in estimating the influence of factors which are not really properly captured by the quantifiable variables. For instance, "the rate of profit earned by affiliates may inadequately express their contribution to the organisation of which they are part... Moreover, the more vertically or horizontally integrated an ME becomes, the less meaning can be attached to the market size or potential of the country in which production is based... finally, the data on which the analyses of investment are based are rarely disaggregated by type of economic activity. Because of this, it is impossible to assess the extent to which different types of overseas operations are influenced by different variables."<sup>54</sup> For what they are worth,

however, they imply the following for less-developed host countries:

First, a large, politically stable and growing market offers the greatest attraction to MNCs, despite restrictions on ownership or the specific requirements imposed by host governments. However, there is obviously a point, differing from firm to firm, beyond which such conditions would become unacceptable.

Second, fiscal incentives are not *per se* very effective in drawing foreign investors, unless they are the only difference between alternative locations.<sup>55</sup> They may, therefore, be important for small countries or for 'footloose' investors seeking export-processing zones.

Third, a large part of MNC investment behaviour is determined by such factors as oligopoly, technology, marketing, etc, (discussed previously) which are *internal to the firm*, and not under the control of host countries. However, an understanding of such factors may lead to a better exploitation by the host country of its bargaining strength.

## III

### Organisational Aspects of MNC Behaviour

We may consider the organisational aspects of MNC expansion and behaviour in four parts: the internal structure of management and control; the strategies of financing and transfers; the attitudes to joint ventures; and the implications of the evolving structure for the distribution of power.

#### INTERNAL STRUCTURE

The international expansion of business firms calls, on the organisational side, for a co-ordination of various functions between parents and subsidiaries in such a way that the overall objective of the firm is promoted most efficiently without damaging the day-to-day operations of the various units. Clearly such co-ordination requires different organisational structures as firms grow larger and more diversified and as their activities spread across greater distances. If we conceive of the organisation as "a hierarchy of authority and responsibility",<sup>56</sup> as all business must be in order to function at all, its multinationalisation calls for a rearrangement of the hierarchy to cope with the diffusion of power and the complexity of international and internal communication implicit in growing size. There is a vast amount of literature on this subject,<sup>57</sup> which we shall not go into here; it will suffice for our purposes to point out the main trends in this rearrangement.

Let us start with the organisation of domestic firms as they grow larger. Organisation theorists classify the deve-



## **NATION REGAINS SPIRIT OF ADVENTURE 1975-76**

# **New life in villages**

- Over six and half million house sites allotted; 368,000 of them developed. Construction of 246,000 houses completed.
- Bonded labourers numbering about 47,000 freed.
- Land ceiling laws yield 1,667,000 acres of surplus land, out of which 424,000 acres have been allotted so far. Beneficiaries number nearly 180,000.
- Nineteen Rural Banks set up; 50 more planned during 1976-77. Co-operative credit institutions strengthened.



lopment of firms into three stages. Stage 1 refers to the owner-manager firm. Stage 2 refers to the firm which has functional departments (responsible for sales, production, marketing, finance, etc), each directly responsible to the president; it breaks down the initial leadership role, unified in the Stage 1 entrepreneur, into several component parts, each with its own organisation and separate hierarchy. Stage 2 organisations can reach very large sizes, but are generally representative of industries in which the product range is narrow and the technology is stable (e.g. steel and paper). In Stage 3 the organisation is reordered in such a way that a number of Stage 2 organisations are set up to deal with separate products or areas (or some combination of product and area), but with some vital co-ordinating functions centralised at the apex of the firm. These functions concern the efficient operation of the entire enterprise as one commercial unit, and so must monitor and control the relevant parts of the functioning of each of the product/area divisions: the allocation of finance, strategic planning of investment and marketing, and sometimes the direction of R and D. The exact nature of the centralisation depends on the nature and history of particular firms, but the necessity of such a process for growing and diversifying firms seems to be inexorable.<sup>58</sup>

In the sphere of foreign investment there is a parallel development. The subsidiary starts in Stage 1 with a fair amount of autonomy, which is progressively reduced as the operations grow larger and the parent develops a 'global perspective'. The usual development is the setting-up of an international division to co-ordinate all foreign activities, rather similar in concept to a functional Stage 2 division (though an international division is also sometimes used in firms with domestic Stage 3 structures). As the international division grows there are pressures to break it down into a Stage 3 'global' structure, with product strategies being devised for the whole world market, or for large areas. This 'global' structure is being further developed into a 'grid' structure, still nascent, in which functions are co-ordinated in various novel ways to achieve optimum control and communication.

The tendency, if we may generalise somewhat freely, is for MNCs to knit the structure of organisational power into tighter hierarchies, with the most important decisions taken at the centre and the more routine ones left to the

subsidiaries. Given the necessity of long-term and flexible central planning, the need to maximise the benefits of diverse and far-flung sets of operations, and the nature of oligopolistic competition, (and given also the development of quick, efficient and widespread means of international communication and travel, on the significance of which see Kindleberger), it is inevitable that such structural changes should occur, and that they should be accompanied by corresponding changes in corporate philosophy, attitudes of executives, group loyalty, and so on, which are psychologically necessary for their implementation.<sup>59</sup>

#### FINANCIAL STRATEGIES

With a centralisation of financial control and the need to operate across several different political, currency, tax and control regimes, MNCs are developing particular financial strategies which can maximise their overall profits in, and reduce overall exposure to, different conditions and risks.<sup>60</sup> These strategies involve the following:

(1) *Capital Financing*: MNCs prefer to commit a small amount of their own capital for the initial investment and to raise the bulk of their requirements locally. Thus, it has been noted for US MNCs in manufacturing that in the period 1966-70 the amount of equity investment by the parents was only 12 per cent of the total expenditures on investment and remittances: some 35 per cent came from local borrowing, 27 per cent from profits and 26 per cent from depreciation allowances.<sup>61</sup> Such a policy not only minimises the parent company's exposure to various sorts of risk; it also enables them to 'gear' their capital very highly on local borrowing and so maximise the returns earned.

MNCs sometimes find it advantageous to expand by acquiring going concerns than by setting up new ones. The US Tariff Commission (1973) notes four advantages of acquisition: first, it may allow rapid market entry; second, it may yield proprietary control over a body of technology; third, it may offer an efficient operating plant and skilled personnel; and, fourth, it may cost less than its true worth (in the eyes of the MNC). In LDCs the last two reasons are particularly significant: the addition of prestigious brand names, new products and aggressive marketing to a going concern can do wonders to its earning capacity. Despite the reluctance which many host governments exhibit towards foreign

takeovers, we find that almost 65 per cent of 2,904 subsidiaries of 187 US and 209 other MNCs on which there is information had, by the end of the 1960s, been acquired by this method in LDCs.<sup>62</sup>

(2) *Financial Transfers*: A closely integrated framework of financial relationships between different units of the same firm provides a variety of channels through which funds can be transferred between them, openly or otherwise, with relative ease.<sup>63</sup> Some of these channels, such as transfer-prices, royalties, fees, interest and similar payments, are now well known in the literature.<sup>64</sup> Others are more devious, and are perhaps worth noting. One of the less publicised findings of the Watergate investigation, reported in *The Times* (1974) is as follows:

American Airlines, for example, 'laundered' its \$ 55,000 (about £ 22,000) contribution to the President Nixon campaign by channelling cash through a New York bank to the private Swiss bank account of a Lebanese agent, who in turn sent the money to the re-election committee via a different New York bank. The expense was charged by the company to the agent in connection with a used aircraft to Middle East Airlines. Ashland Oil made its illegal \$ 100,000 contribution to the same cause by charging the expenses of an undeveloped leasehold held by its subsidiary in Gabon, Africa ... The Goodyear Tire and Rubber Company also made use of Swiss bank accounts, charging its \$ 100,000 to the President's campaign to volume discounts from suppliers of the company's foreign subsidiaries ... Gulf Oil made its contribution of over \$ 125,000 through a subsidiary registered in the Bahamas charging it off merely as a miscellaneous expense.

The purpose of this particular case does not concern us: what does is the existence of such means of transfer, which are in practice difficult, if not impossible, to check from outside the firm. The amazing, and seemingly endless, disclosures about illegal and semi-legal payments to foreign governments and agents made by several US MNCs (and large military equipment manufacturers which are not multinational in their manufacturing operations), now appearing almost every day in the United States, have revealed so much about the potentialities for hidden transfers that it would take a major research project simply to analyse and classify them. As a *Financial Times* correspondent notes, these may only be "the tip of the iceberg", and "the Comptroller of the Currency has tacitly admitted [that]



the American tax authorities have neither the manpower nor the expertise to track down all these channels".<sup>65</sup> The 'iceberg' may, of course, contain various US (and non-US multinationals) not yet subject to investigation.

(3) *Asset/Liability Management*: An appropriate management of assets and liabilities in different currencies, including the leading and lagging of payments, can serve to minimise MNCs' exposure to exchange risk, and in some cases, to actively speculate against weak currencies. Such strategies are in the process of evolution and refinement, and different MNCs use them actively to different extents. Obviously, it is unrealistic to think of MNCs achieving any sort of 'optimum financial planning' in a world of great complexity and uncertainty; "however, as the pressures of worldwide competition mount, the US multinational enterprise will find it more essential to explore all the financial tools at its command to achieve an optimal outcome".<sup>66</sup> In other words, the process of growth and competition will *itself* necessitate a more 'rational' use of all such devices, to go together with increasing control of rent-yielding advantages and their worldwide exploitation.

#### JOINT VENTURES

These considerations also go a long way to explaining MNCs' attitudes to joint ventures, and particularly to holding minority or locally controlled positions. In general MNCs prefer to retain control of their affiliate operations and to expand *via* wholly-owned subsidiaries rather than dilute their ownership to other (local) firms. Thus, the UN study reports that "at least 80 per cent of United States affiliates and 75 per cent of United Kingdom affiliates are either wholly-owned or majority controlled. In terms of stock of investment, these two countries have placed about 90 per cent in affiliates which are at least majority-owned".<sup>67</sup> Similarly, Vernon provides data on the ownership patterns of 187 US and 209 other MNCs for 1968-70, in LDCs only, which show that out of 1,407 US subsidiaries on which information was available 50 per cent were wholly-owned, 18 per cent majority-owned and 32 per cent minority-owned. Out of 1,349 other countries' subsidiaries, these ratios were 24 per cent, 28 per cent and 48 per cent respectively.<sup>68</sup> Thus, of the total of 2,726 subsidiaries, 59 per cent were either wholly-or majority-owned, with US MNCs revealing a much more marked preference for such a position

than the MNCs of other countries. A substantial, but unknown, proportion of minority-owned affiliates were also under the effective control of MNCs. In view of the recent policies of most LDCs to have local majority ownership of foreign investments, these figures testify to the bargaining strength and entrenched positions of MNCs in them.

It is clear why MNCs prefer to retain control and maximise their equity stake. Since the very essence of going multinational is to exploit the commercial rents yielded by applying a marketing and technology 'package' at relatively low marginal cost, an MNC would not wish to share these rents with local shareholders who can offer little in return. Furthermore, the rationalisation and centralisation of authority increasingly tends to make a sharing of control difficult and cumbersome.<sup>69</sup> The more 'global' a firm's outlook, the tighter-knit its organisation and more subject to technological/marketing change the industry, the more does local participation impinge on its ability to adapt and to maximise the rents it earns on its package. This is not to say that MNCs never accept joint ventures. Obviously they do, for several reasons: first, because government policies in many LDCs make this the only method of entry;<sup>70</sup> second, because local partners may sometimes provide valuable local marketing knowledge and government contacts, or the opportunity, where the local partners are already active in distribution or production, to extend oligopolistic control over some part of the manufacturing, technological or marketing process; and, third, they may join up with *other* MNCs to tackle particularly large or risky projects,<sup>71</sup> and, more recently with other MNCs and *governments*, to cope with very high technological demands (as with INTELSAT).<sup>72</sup> The most important reason for the growth of joint ventures in LDCs has, however, simply been that it has become a necessary condition for MNCs to set up at all in many developing countries.

This sort of reasoning also makes it apparent why *some* MNCs, and many small foreign investors, will be less hostile to joint ventures. The less-centralised multinationals, or the small firms, may be content to give their subsidiaries a fair amount of autonomy, may be dependent on local capital or may be particularly risk-averse. In some cases they may simply have a low-rent yielding package which reduces their bargaining power and makes them less reluctant to sharing it. It is important

when formulating policy to bear this in mind.

#### DISTRIBUTION OF POWER

It is an extremely difficult task to assess the distribution of power in large organisations, and even more so in complex, modern societies; obviously it is not a subject we can tackle at any great length here. Yet it is useful for our purposes to have a general idea of the direction of change implied by the growth and evolution of MNCs. We shall postulate two trends which strike us as being true in very general terms, though there may be exceptions and deviations from them.

First, as regards the internal distribution of corporate power (within MNCs), it seems that the rearrangements of the hierarchy implied by organisational changes has led to an increasing concentration of power at the apex, the home office, of the multinationals. In most cases this power is exercised by nationals of the home country, who are united by a common language and culture, and who are usually also shareholders in their respective organisations. In some firms there is some multi-nationality of ownership and power (as with cross-country mergers in Europe), but the process of multinational development necessitates centralisation, and this process tends to exclude people who come from different cultural or linguistic backgrounds. This is perhaps not as significant as the fact that LDCs are more or less *excluded* from participation in the centralised use of power in MNCs, so that for them its sharing among different nationalities, say, in Europe, is really irrelevant.<sup>73</sup>

Second, as regards the distribution of power in society, it is widely argued that the growth of MNCs has posed an increasing challenge to the traditional power of national governments<sup>74</sup> and that new forms of political and economic control are needed to cope with it in the future. It is less generally admitted that there may be some association of changes in the distribution of socio-political power with the growing economic power of these corporations. It has been argued that the rise of large corporations (monopoly capital) has led to the subtle, but very real, formation of a 'super elite' in developed societies wielding enormous influence on their functioning, policies and foreign relations.<sup>75</sup> This must *not* be taken to mean that particular firms or even the super elites *always* dominate policy (though they sometimes do), or that governments or various sections of



society are happy to part with effective power to large private corporations, or, indeed, that bigness is not feared and resented.

What it does in our opinion mean is that fundamentally, governments of the developed 'free world' acquiesce in and support the general direction of development of capitalistic enterprises (in their present 'monopoly capital' form), since these comprise the mainstay of their economies, and that, despite occasional checks and shifts in the balance of power, they will continue to follow policies which provide these enterprises with a conducive environment.<sup>76</sup> Furthermore, whether or not the internationalisation of business increases confrontation between individual developed states, (we think such confrontations are superficial)<sup>77</sup> from the point of view of LDCs as a group it seems fairly likely that any serious challenge to its spread into their economies will lead to various subtle or overt pressures from developed countries' governments to 'liberalise' in favour of private enterprise. We have remarked previously that this is not a major or direct factor responsible for the growth of particular MNCs (with a few exceptions), but its importance in fashioning the environment should not be lightly dismissed. Pressures may not always succeed, of course. Much depends on the configuration of pressures and interests within the LDCs, and how these react to the changes in the developed capitalist world and to the growth of the MNCs.

#### IV

#### Salient Features of MNCs

Let us now draw upon the preceding analysis to highlight some of the most important features of MNCs.

First, MNCs are heavily predominant in certain industries characterised by the importance of marketing and technology and by an oligopolistic or monopolistic organisation of industry within the developed countries.

Second, it follows from the nature of MNCs' expansion and inherent mode of operation that their products are new and advanced, and in LDCs must cater for a market which has relatively high incomes, sophisticated tastes and is responsive to modern marketing techniques.

Third, these products are generally produced by techniques which are the most advanced in their respective fields, often backed by heavy R and D, and transferred wholesale to all areas of operation in order to maximise the returns from given packages of technolo-

gical/marketing advantages.

Fourth, MNC expansion tends to reproduce internationally the oligopolistic conditions of their home markets and is marked by a search for stability, predictability and congenial environments.

Fifth, the maturing of MNC oligopolies may bring in its train various commercial practices to bolster the dominance of the market leaders, and may in the long run be supported by overt or covert policies followed by their home governments.

Sixth, MNCs are most attracted by large and growing economies which offer reasonably stable political conditions for their operation.

Seventh, their organisational evolution leads to a centralisation of certain vital functions concerning finance, location, marketing and research, and lends itself to rational worldwide strategies of financing and production.

Eighth, the nature of oligopolistic advantage and organisational needs cause MNCs to prefer complete or majority ownership of subsidiaries. It may also lead in appropriate cases to a preference for take-overs of existing firms and the commitment of a small dose of capital and a large dose of other 'advantages' which raises the returns on the foreign investment.

Ninth, the increasing role of a few hundred MNCs in international production, trade, investment and technology, and the increasing centralisation of power within these corporations, has important implications for the structure of socio-political power within developed as well as less-developed countries.

#### Notes

[I am grateful to Paul Streeten for comments on an earlier draft.]

1 See Corden (1974) and Johnson (1972), for summaries of trade theory on multinationals and for a discussion of how it can be adapted to the newer explanations of MNC expansion.

2 The oligopolistic theory of foreign investment was first advanced in general terms by Hymer (1960) and later expounded by Kindleberger (1969), Caves (1971) and Knickerbocker (1973). The particular form which oligopolistic growth takes was analysed by Vernon (1966, 1971) and, under his direction, by various people working on the Harvard MNC Project; the trade aspects of the theory are summarised in Wells (1972). The work of Penrose (1959, 1968) and Marris (1964) contributed greatly to the understanding of the internal structure of large firms. All oligopolistic theories have naturally drawn heavily upon the closely

related field of industrial organisation, starting from the classic work of Bain (1956) on barriers to competition, and continuing with several important contributions by Scherer (see his 1970 book), Shubik (1959), Mansfield (see his 1974 paper) and several others. For recent work and references see Aaronvitch and Sawyer (1975), Blair (1972) and Blumberg (1975). For an approach which links oligopolistic theories with location theory in explaining multinational growth see Buckley and Casson (1976).

3 'Market power' is not easy to define, since it represents a departure from a hypothetical (and usually quite unrealistic) competitive market situation. It may, however, be simply understood as the ability of particular firms, acting singly or in collusion, to dominate their respective markets (and so earn higher profits), to be more secure, or even to be less efficient, than in a situation with more effective competition (or official control, where technology demands high degrees of concentration in production). The concept may, of course, be applied to buyers (monopsonists) as well as sellers.

4 For a review of evidence on the determinants of US expansion in Canada by merger see Baumann (1975).

5 For a theory of international conglomerate acquisitions, based on theories of capital asset pricing, see Adler and Dumas (1975); the main faction which distinguish international from national capital markets are taken to be segmentation of private portfolio investments and the existence of exchange risk.

6 Aliber (1970), pp 28-30.

7 This is not to say that MNCs do not also flourish in many 'medium' or 'low' technology industries, drawing their market power from other sources. On the importance of technology see the US Tariff Commission (1973), Chapter VI, Vernon (1971), Freeman (1974) and Parker (1974). For a more general analysis see Johnson (1975).

8 See UNCTAD (1974).

9 National Science Foundation (1975). A survey by the Conference Board (1976) shows that the proportion of applied R and D expenditure by US MNCs is even greater for subsidiaries than for parents.

10 The US Tariff Commission (1973), p 552-4, assigns 65 per cent of total US R and D to 'development'. The proportion would be much higher if its estimate for 'basic' research (15 per cent) was brought down to NSF levels. For data on other countries see OECD (1970 a).

11 Though many Marxists may also assign technical progress the functions of increasing capitalist control over the production process (by automation), of promoting the dominance of monopoly capital (by encouraging concentration) and of increasing capital's repression of labour (by imposing greater discipline and perhaps more alienation).



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- 12 See an interesting discussion of various types of innovation strategy in Chapter 8 of Freeman (1974).
- 13 *Ibid*, pp 259-66.
- 14 There is no precise Marxist equivalent of 'technology' of this type, but clearly its function lies more in the realm of *realising* surplus value than of increasing it.
- 15 Freeman (1974), p 267. For more on the meaning of product differentiation see Grubel and Lloyd (1975).
- 16 On pharmaceuticals see Lall (1975 b).
- 17 The role played by patents changes similarly. See Parker (1974) and Freeman (1974).
- 18 A good example is the recent work by Johnson (1975). The welfare implications of this aspect of MNC growth are sometimes further confused by including *marketing* with technology (broadly defined) as 'knowledge' — with all the (implicitly) desirable attributes — and using 'knowledge' to explain such growth. See, for instance, Buckley and Casson (1976).
- 19 In this context, the importance of such 'scouting' activities is illustrated by the US Tariff Commission (1973), which remarks that "except for a few unusual years during and following World War II, the Europeans have led in the output of scientific discoveries and basic research. American companies' prowess has lain in quickly converting such results into commercially successful products and processes" (p 553). The division of R and D work between small firms which 'innovate' initially and large firms which 'develop' innovations is also noted in the case of the hovercraft by P S Johnson (1975), specially p 313, and in general Mansfield, in *Business Week* (1976).
- 20 See Vernon (1971).
- 21 See *Financial Times* (1974 a and b).
- 22 See Vernon (1974 b), Pickering (1974), and references mentioned there, as well as various UNCTAD reports entitled *Restrictive Business Practices*. For a popular description of the various illegal and semi-legal practices undertaken by IBM to retain monopolistic control of its technology see Malik (1975).
- 23 Though the large firms are not always the most successful innovators. See Freeman (1974) and Kamien and Schwartz (1975).
- 24 See, for instance, Vernon (1971), Parker (1974), Baumann (1975), Horst (1975), Aaronvitch and Sawyer (1975), Dunning (1973) (1974).
- 25 For recent contributions to the enormous literature on this subject, see Comanor and Wilson (1974) and Cowling, Cable, Kelly and McGuinness (1975) on the US and the UK respectively. See also Galbraith (1967) for a more controversial general discussion.
- 26 Even low-technology industries have large numbers of MNCs. See Parker (1974) for a general description and Horst (1974) for an analysis of the role of advertising, product differentiation and brand promotion in the US food industry.
- 27 The role of marketing in the success of firms even in a high-technology industry like pharmaceuticals is crucial. See Lall (1975 b).
- 28 Caves (1974) notes this as a possible advantage of MNCs in the US-Canadian case.
- 29 Kindleberger (1969), pp 19-23.
- 30 See Chapter 1 of Grubel and Lloyd (1975) for explanation and references.
- 31 For an interesting discussion see Blair (1972), Chapter 5. However, see Pickering (1974), chapter 2, for a brief review of the evidence that plant-level economies may be important.
- 32 This is illustrated for India in a recent study by Kochanek (1974) who analyses the open and hidden pressures exerted, sometimes successfully and at other times not, and the emergence of business (local and foreign) as the 'best organised pressure group in the country'. Also see Kidron (1965). On more general issues see Streeten (1971), dos Santos (1970), Frank (1969, 1972) and Sunkel (1969-70, 1973).
- 33 See Horst (1975) for evidence that the external growth of US MNCs has strengthened their *domestic* market power and raised *domestic* profits. Parker (1974) reporting on a study of 411 subsidiaries of foreign companies in the UK, finds that they grew faster than their respective domestic counterparts, showing a relative 'Commercial independence' of their host environment (pp 198-205).
- 34 Cohen (1975) lays a great deal of stress on risk-spreading as a motive for foreign investment, but it is more likely that this is a consequential and cumulative benefit of international expansion than a causal factor. MNCs are *able* to spread risks more widely only because they possess certain other advantages; these advantages are not created *in order to* spread risks. In fact, after a detailed econometric exercise, Cohen concludes that while the data show that MNCs enjoy more stability in profits and sales "This result does not, of course, allow one to conclude that US firms invested in foreign countries in order to reduce their risks. Reducing risk (or increasing sales or profits) may be the unintended result of corporate action taken for other reasons" (p 54). We are not sure that it is fair to class risk-reduction in the same category of motivation as growth or profit, but the moral as regards the former is clear. For a survey of such theories, based on a 'portfolio theory' of investment behaviour, See Stevens (1974); a brief critique is provided in Buckley and Casson (1976).
- 35 'High' and 'low' technology industries are defined with reference to the proportion of R and D expenditures in total costs (see, for instance, Parker (1974) and the US Tariff Commission (1973) Chapter I); *within* each industry multinational firms may generally be assumed to use the most advanced techniques available.
- 36 For orthodox expositions of this view, see Chapter 6 of Kindleberger (1969) and Corden (1974 a); and for a Marxist interpretation, see Murray (1972).
- 37 On developed areas see Adam (1972) and on LDCs see Watanabe (1972), Helleiner (1973), Finger (1975a) and Sharpston (1975).
- 38 A detailed survey of the electronic industry is provided in UNCTAD (1975). Two interesting points noted in this report are that with a rise in wage costs in the 'older' centres like Hong Kong and Singapore, MNCs have moved to cheaper areas in South East Asia and Central America and the Caribbean (p 16); and that East European firms are also entering into subcontracting arrangements with LDCs in this industry (p 2).
- 39 For a concise and simple exposition see Vernon (1974b).
- 40 See the excellent study by Knickerbocker (1973), based on the investment behaviour of 187 large US MNCs, which clearly demonstrates the importance of such reaction as a defensive and not, except obliquely, as a profit-maximising measure. Also see Vernon (1974) for a discussion of three different types of oligopolies — 'innovative', 'mature' and 'senescent' — and the different pressures these generate for the firms concerned.
- 41 Knickerbocker, p 195.
- 42 See, for instance, Barratt Brown (1974), Magdoff (1972) and Hymer and Rowthorn (1970).
- 43 Hymer and Rowthorn (1970), pp 81-2.
- 44 Hirsch (1967) and Vernon (1966). For subsequent work on this model see Finger (1975 b) Grubel and Lloyd (1975), Wells (1972) and Hirsch (1975). The relationship between trade patterns and technological change was analysed earlier by Posner (1961) and developed by Hufbauer (1965). For a synthesis of the product-cycle and technology-trade analyses, see Johnson (1972) and Grubel and Lloyd (1975), and for a simple, recent exposition see Buckley and Casson (1976). Klein (1973) provides an interesting attempt to merge 'learning' and product-cycle into a new comparative advantage theory.
- 45 Since military R and D is very important in the US, clearly the pressures to locate manufacturing plants for military innovations in the home country are greater, both for security and for testing.
- 46 For an interesting application of the product cycle theory to innovations in petrochemicals, a somewhat untypical industry (with great economies of scale, relatively insignificant labour costs, lumpiness in investment requirements), see Stobaugh (1971).



- 47 Vernon (1971), p 109. For a more recent exposition which takes newer developments into account see Vernon (1974) and Grubel and Lloyd (1975).
- 48 See Baranson (1970), Baumann (1975), McManus (1972), Parker (1974), Stopford and Wells (1972) and Vernon (1971).
- 49 This assumes that the MNC, once it sells a licence, does nothing further to profit from its other advantages. However, it is worth noting that full or majority ownership is not essential for the full exploitation of the package; an appropriate combination of management contracts, fees, technology agreements and interest charges can give it nearly the same advantages as ownership and control even with minority or nil participation. Nationalisation of foreign firms has, for this reason, often failed to gain the host country a greater share in foreign profits.
- 50 The discussion has been confined to the economics of modern international manufacturing investment; it is conspicuously incapable of explaining older forms of investment which were governed by the advantages of direct political and/or economic domination, e.g. early British investment in India and public utility investments by US firms in Latin America, or by cultural, family and political ties, e.g. the movement of capital accompanying immigration from Europe to the 'new' white-settler countries, see Birnberg and Resnick (1975). On the importance of the latter to the growth of the US, Canada, Australasia, etc, see Bagchi (1972); such investment was not, of course, available to the non-white colonies, which, on the contrary, probably provided the bulk of the resources which were channelled to these areas. Nor does the discussion apply to investment determined by the location of natural resources (plantations or mines) where the rights were granted under colonial or semi-colonial rule. In some types of resource-based investments, however, MNCs do have advantages in the form of technology, capital or market-control, or simply the ability to spread risks where finding the resource is a problem.
- 51 For recent summaries, see Dunning (1973), Stevens (1974), and Reuber (1973).
- 52 Here we are referring not to market or exchange-rate instability, with which MNCs are well-equipped to cope, but only to instability which could threaten their very existence or mode of operation. This simplifies a complex process of decision making in large organisations (see Aharoni, 1966), but does not seem to do violence to the general evidence on MNC behaviour.
- 53 See Stevens (1974) and Dunning (1973).
- 54 Dunning (1973), p 304.
- 55 See the detailed discussion of such incentives in Reuber (1973), pp 120-32.
- 56 Stopford and Wells (1972), p 11.
- 57 See, for instance, Stopford and Wells (1972), Vernon (1971), Rumelt (1974), Brooke and Remmers (1970), Hymer (1972), and, at a more popular level, Barnet and Muller (1974).
- 58 See Stopford and Wells (1972) for a detailed study of the evolution of 170 US MNCs.
- 59 "... in mature enterprises a seasoned financial corps come into place, trained within the system of the enterprise and stationed at various key points in the field and at headquarters. This corps has generally been made up of men attuned to the signals and conditioned to the rules of thumb that the system has devised ... fortified by internal manuals ... Enough conditioning, it is assumed, will breed the necessary conformity while allowing for local initiative and local adaptation." Vernon (1971) p 134. On the use of various devices like 'corporate acculturation' and 'systems transfer' see Weichmann (1974).
- 60 See Robbins and Stobaugh (1974).
- 61 US Tariff Commission (1973), pp 420-21.
- 62 Vernon (1974) p 19. The relevance of merger theory to theories of direct foreign investment has been remarked on earlier.
- 63 "... A system with twenty-five units (a parent and twenty-four subsidiaries) and ten different types of links between each pair of units would have 3,000 intercompany financial links. The number of alternative solutions for the entire system would run into the millions." See Robbins and Stobaugh (1974), p 17. Also see Brooke and Remmers (1970).
- 64 See Lall (1973) and Vaitos (1974).
- 65 *Financial Times* (1976) report by Jurek Martin.
- 66 Robbins and Stobaugh (1973) p 171.
- 67 UN (1973), p 12. On attitudes of foreign investors see Reuber (1973) pp 224-5.
- 68 Vernon (1974), p 19. The source of the data is the Harvard Multinational Enterprise data bank.
- 69 MNCs with high-technology or high-marketing specialisations resent joint ventures most, as do firms which are in the process of 'rationalising' production; see Franko (1971), Stopford and Wells (1972), for detailed discussions. Similarly, the possibility of maximising post-tax rents through transfer-pricing is seen by the US Tariff Commission (1973) as "a principal reason why multinational companies prefer 100 per cent ownership of foreign subsidiaries." (p 134).
- 70 As noted above, even a minority position with appropriate management and technology contracts, and the use of transferpricing, may give an MNC sufficient control over buying, selling and production to yield high rents. If the alternative to a joint venture is not investing at all and losing a market, the MNC may in any case be prepared to accept a lower (but still positive) rate of return on its 'package'. On some advantages of joint ventures based on a sample of British investments in India and Pakistan, see Tomlinson (1970).
- 71 This is more likely to occur in LDCs in a mature oligopoly with technological stability, where co-operation in a particular venture in a new area will not cause one MNC to give up any special asset to another, and will not impinge on its established market position in its own area of dominance.
- 72 For a brief review of this sort of co-operation, which occurs mainly (for manufacturing industry) in developed countries, see Tharp (1976).
- 73 See Franko (1973) for a recent description of international staffing policies of MNCs. Franko finds that high local staffing occurs in subsidiaries after a certain stage of multinational expansion, but it is never significant at the headquarters. Thus, he concludes, "The continued dominance of home-country managers at headquarters further leads one to suspect that a multinational management mix may be an unrealistic target". Hymer (1972) analyses the broader consequences of this phenomenon.
- 74 See Behrman (1970), Gilpin (1976) Vernon (1971), and Stephenson (1972).
- 75 For different Marxist interpretations of the relationships between capitalists and state power see Poulantzas (1973) and (1975) Miliband (1969); for others see Galbraith (1967), Blumberg (1975), Gilpin (1976), Barnet and Muller (1974), and various works by Berle, appraised in Tilman (1974).
- 76 On the functions and role of the capitalist state vis-a-vis international firms see Poulantzas (1975) and Murray (1971).
- 77 Bergsten (1974) argues the US government may have to intervene on behalf of its MNCs to protect them against pressures exerted by other governments. A similar argument about clashes between different 'imperialist' blocs is advanced by several Marxists; for a review and convincing refutation see Poulantzas (1975).

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### Amar Dye-Chem

AMAR DYE-CHEM's chairman J H Doshi, says that foreign technical collaborations have become very expensive due to changes in the world situation and currency rates of exchange. He also adds that many multi-national companies are not inclined to part with their latest technical knowhow, as they think that India is gradually becoming their competitor, particularly in the South East Asian countries. Considering that the company has to be self-reliant in course of time, the company has already invested about Rs 2 crores in research and development facilities and intends to invest more for this purpose. Besides, the company intends to set up a special cell to conform to the government's policy of treating the effluents and controlling other industrial activities in such a way as to prevent all types of hazards to the population. Meanwhile, the company's research laboratories have finalised processes for 42 products of various groups of dyes and intermediates, 23 in the pilot plant, and even commenced commercial production of 12 items. These include assorted products like new reactive dyes, acrylic fibres dyes, rubber chemicals, vat dyes and their intermediates. During the first five months of the current year, the company's exports amounted to Rs 74 lakhs as against Rs 67 lakhs in the same period last year. It was also holding export orders to the tune of Rs 78 lakhs.



# Development with Growth: A Quarter Century of Socialist Transformation in China

Suzanne Paine

*While completely reorganising all political and economic institutions, China appears to have achieved what by both historical and contemporary standards is a quite remarkable record with respect to economic growth and social justice.*

*The aim of this paper is twofold: to review the empirical evidence about China's socio-economic achievements and to examine how the Chinese experience has taken the course it has — in other words, to provide an up-to-date integrated survey of China's macroeconomic performance and social welfare record, and of the theory and policy which have underlain them.*

*The issues focused on here are, first, the evidence for and against the widespread view that, despite considerable achievements in the social welfare field, Chinese macroeconomic performance has been at best modest; second, the debate over whether or not inequities have been reduced substantially; third, the theory underlying the primarily economic aspects of the Maoist strategy for development; and, fourth, the policies used to implement the Maoist strategy and the extent of their success.*

## Introduction

DURING the last 25 years, the most widely accepted estimates of per capita consumption in China show that it has grown by an average compound growth rate of at least 3 per cent per annum (the precise figure depends on the population estimate used — see further below); at the same time, income differentials have been narrowed considerably and consumption differentials reduced even more. Simultaneously, immense institutional transformation has taken place, designed to effect China's transition to socialist organisation. In other words, while completely reorganising all political and economic institutions, China appears to have achieved what by both historical and contemporary standards is a quite remarkable record with respect both to economic growth and social justice. The aim of this paper is twofold: to review the empirical evidence about the latter socio-economic achievements, and to examine how the Chinese experience has taken the course it has — in other words, to provide an up-to-date and integrated survey of China's macroeconomic performance and social welfare record, and of the theory and policy which have underlain them.

These subjects can now be studied in much greater depth than has until recently been possible as a result of the availability of new (or fairly new) material on both the political economy of the Maoist strategy for socialist development (because of the publication in the West of the increasingly well known *Wan-sui* volumes)<sup>1</sup> and on the extent of actual economic progress. (*Inter alia*, the *Wan-sui* volumes contain a

116-page review of a major Soviet textbook on political economy and a discussion of Stalin's "Economic Problems of Socialism in the Soviet Union". Although both these writings are primarily concerned with transition to socialism and with the contradictions which arise during this, they also contain rich insights into both China's economic development experience and Mao's philosophy of political economy.) On the other hand, however, space considerations here mean that any attempt to survey and integrate the theory, policy and results of China's first quarter century can cover only selected aspects in reasonable depth. The issues focused on here are, first, the evidence for and against the widespread view that, despite considerable achievements in the social welfare field, Chinese macroeconomic performance has been at best modest; second, the debate over whether or not inequalities have been reduced substantially; third, the theory underlying the primarily economic aspects of the Maoist (as compared with the Liu Shao-chi/Teng Hsiao-ping) strategy for development; and fourth, the policies used to implement the Maoist strategy and the extent of their success. The paper is arranged in sections accordingly, with a concluding section which draws together the main results.

Space limitations also mean that many Central issues have to be touched on unduly briefly or omitted altogether, and the reader directed (when possible) to fuller discussions of these questions elsewhere (Paine 1976 a and b). For instance, the monetary (as opposed to the physical) aspects of output performance and the associated

valuation problems are here eschewed almost completely, as are detailed critiques of certain well known US, Soviet and Indian interpretations of the Chinese experience; a recent contribution (by A R Khan for the ILO) on the subject of income distribution in China reached the author too late for inclusion of any thorough appraisal; and comparative data from an international and historical perspective are only sketched, as are contrasts with the Soviet experience. EPW readers will undoubtedly find many additions to make to this list.

## I

### The Macroeconomic Overview of a Quarter Century of Socialist Development

#### 1.1 INTRODUCTION

A view in common currency is that the overall macroeconomic performance of the Chinese economy since 1949 has not been all that good: rather China's achievements have been in the realms of social welfare and distribution, resulting in a population which is healthy, properly fed, and adequately clothed, housed and educated. As Riskin (1975) noted, there has been a remarkable consensus on how China's "success in alleviating extreme poverty, reducing unemployment, and diminishing inequality, is probably unequalled among the less developed countries" (p 13), (although recently some writers have attempted to devalue these Chinese achievements — see further section II below).

To permit critical appraisal of the quarter century of Chinese macroeconomic performance since liberation, we



present here a summary range of the full range of our estimates (based on varying assumptions and incorporating the most recently available information) of selected aspects of China's economic record at the aggregate level (for the full range, see Paine 1976 b). Since the only *up-to-date* study (USCJEC 1975) which permits a full overview of 25 years of socialist organisation in China is based on certain highly controversial assumptions, the presentation of a selection of the estimates obtained when such assumptions are modified is obviously necessary if a balanced as well as up-dated picture is to be obtained of the Chinese experience (in terms of conventional criteria of economic measurement). Although space precludes full discussion, this section also touches on the relationship between earlier estimates and the range presented here, and on explanations for the main divergencies.<sup>2</sup> The outcome enables us (1) to establish certain features of China's macroeconomic record which hold for virtually all the combinations of assumptions considered, and (2) to examine these briefly in historical and international perspective and, with *EPW* readers in mind, to draw on relevant Indian comparisons where appropriate (though *not* to embark on one of the still fashionable exercises in India-China comparisons<sup>3</sup>).

## 1.2 INTRODUCTION: EVALUATION CRITERIA

A country's macroeconomic record can be described by a large number of economic indicators, of which those most frequently used are national accounts data such as GNP, NNP per capita, etc. However, as Seers points out (1972), p 26,

"the blunt truth of the matter is that... the published national income series for a large number of countries have very little relevance to economic reality". (Note: by 'countries', he means LDCs.)

The reasons for this are numerous — the problem of evaluating the tertiary sector in LDCs being especially notorious. The latter can be eliminated by examining a country's agricultural and industrial value added record only, but even then (and even assuming comprehensive coverage), serious valuation problems arise — or rather serious problems of interpretation, since the Central question concerns whether the price system used for measurement produces an accurate indication of the

magnitude and structure of production. Physical output data are much less ambiguous, though heated debates may (and, as we shall see below, do) arise over such matters as what is the net equivalent of a certain gross physical output of foodgrains. Consequently, we shall rely particularly on the use of physical data in this paper, though the valuation spectre is immediately raised as soon as we start to discuss indices of the volume of agricultural and industrial production.

## 1.3 THE AVAILABLE DATA ON CHINESE ECONOMIC PERFORMANCE

Initially a few words on the sources and reliability of Chinese data are in order. As is well known, the Chinese published a considerable amount of statistical data during the 1950s, but made available comparatively little (most of which were not accepted by Western 'experts') during the 1960s, though rather more during the early 1970s. The data famine of the 1960s, however, led to a proliferation of Western estimates of Chinese production and living standards, virtually all of which were distinguished by the fact that they were lower than any 'official' figures provided by the Chinese themselves. Then came American-Chinese detente, and a deluge of Western visitors to China, who, after observing conditions there for themselves, concluded that a good deal — if not all — that the Chinese had been saying about their economy was probably accurate. This was further supported by Western studies designed to check the internal consistency of Chinese 'official' data: the most striking example being the Field-Lardy-Emerson (1975) reconstruction of the gross value of industrial output by province. This showed a very close correspondence between provincial totals pieced together from a wide variety of sources, and the national totals announced officially. Other studies by Rawski (1973, 1975), Cheng (1974), Chen (1975) and Wiens (1975) provided further evidence for the consistency of 'official' data. Of course, as Chen points out (1975, p 59), to sceptics (such as Sinha 1975<sup>4</sup>), "proof of internal consistency of published Chinese statistics does not constitute proof of lack of outright fabrication".

Yet given the suspicion (if not direct allegation) by so many self-styled China-watchers that outright fabrication has been the order of the day,

it is worth reporting in full the conclusions of acknowledged experts who are not noted for being particularly sympathetic to the Chinese case. Chen (1975, pp 59-60) writes as follows:

"There is no evidence to indicate that the Chinese maintain two sets of national statistics, one for planning and another for propaganda. In fact, several considerations point to the contrary... it may be concluded that Chinese statistics are not deliberately falsified by the central authorities."

Similarly, Perkins (1975a, pp 128-9) writes

"...considerable evidence has accumulated over the years to suggest that China's published official data, except for the years 1958-60, are at least as reliable as those promulgated by the governments of many other less-developed nations and considerably better than those of a number of them."

Then, commenting on which to choose when a foreign 'reconstructed' series differed only moderately from a Chinese official one, he sensibly points out that it is usually "more reasonable, given the considerable degree of consistency between the two sets of figures, to use the estimates of trained statistical workers in China rather than those reconstructed from incomplete data from a distance of some 10,000 miles away". (pp 150-1).

However, acceptance of the usability of Chinese official statistics still leaves plenty of scope for different quantitative conclusions to be reached about overall economic performance. This is because

- (i) data series are not always complete (particularly during the 1960s);
- (ii) 'official' series do not exist at all for some variables (e.g. capital formation);
- (iii) data may not be presented in the form which Western economists require for making comparisons in terms of their own national income conventions (thus numerous heroic assumptions must be made so as to convert Chinese physical output into a GNP series), or for answering certain basic questions (e.g. how large is the rural surplus, what is the share of agriculture in total investment, etc?);
- (iv) certain figures the Chinese themselves consider to be of dubious reliability;
- (v) there are certain problems raised by the statistical conventions



which the Chinese use. (These are clearly summarised by Chen, 1975, pp 61-67.)

Yet contrary to the impression conveyed by certain Western Sinologists, these problems are by no means peculiar to Chinese economic statistics. Non-existence, incompleteness or unreliability of statistical data is the hallmark of virtually all statistics on LDCs (and even some developed ones). Consider for instance the situation in the case of a less developed economy for which reasonably comprehensive and reliable statistical data are considered to exist, i.e., India. Agricultural output has often been varyingly estimated by different *official* sources, and/or substantially revised over time (e.g., the original 1973/74 estimate of 114 mn tons was ultimately reduced to 104.5 mn). Turkey has long produced two very different GNP series (one by the State Institute of Statistics and one by the State Planning Organisation). Innumerable similar instances of this sort of problem can easily be provided. Certainly, compared with this, differences between the estimates for certain Chinese statistical series look much more reasonable. And although all those working on China would agree that there is much less information available than they would like, there is no doubt that one can reach as well (if not better) grounded conclusions about certain features of China's development as one can for any other LDC.

#### 1.4 ESTIMATES OF CHINA'S POPULATION

Since population data are necessary for the calculation of any per capita statistics, and since alternative population series have been one of the main sources of dispute between Sinologists, we shall discuss these at the outset, despite the fact that they are perhaps the most controversial area of all. This is primarily because of

- (i) the absence of any complete Chinese official population series
- (ii) the difficulties in reconciling the various figures that the Chinese actually have published or reported
- (iii) the reluctance of many Western demographers to believe that China's post-Liberation demographic record could have been all that different from those for other LDCs with comparable per capita incomes.

The outcome of these factors is a range of population estimates as wide as that

illustrated in Chart 1.1 with estimated population for 1975 ranging from 942 million (Aird, mid-year) to 783 million (Kononov reconstructed, probably beginning-year, and with Taiwan subtracted).

Briefly, these various estimates were obtained as follows<sup>5</sup> (starting with the highest):

*Aird* (of the US Foreign Demographic Analysis Division of the Bureau of Economic Analysis, Department of Commerce): This starts from the official figures (slightly adjusted — e.g., by removing Taiwan) for the period 1949-58,<sup>6</sup> including the 1953 census figure of 583 million. The subsequent estimates imply a rate of natural increase in the order of 2.3 per cent (except for the crisis years around 1960 when deaths were assumed to rise sharply); the rate of increase for every year from 1968 on is as high as 2.4 per cent.<sup>7</sup> Such figures follow from his assumption that the birth rate at the end of the 1950s was still very high (around 42 per 1000; see Table A1), and subsequently declined very slowly (to 37 per 1,000 by 1975), while the death rate declined a little more quickly, at least until 1971 (for which he nonetheless gives a figure as high as 15 per 1,000 — greater than that presented in any other source). *Swamy* (1973) obtains similarly high estimates by the even more 'wooden' procedure of extrapolating forward the 1953 population figure by 2.2 per cent per year, making no adjustments whatsoever for year-to-year variations.<sup>8</sup> Since the result can hardly be considered a serious alternative population series, it is not reproduced here.

*Orleans*: This series yields a 1975 population estimate some 10 per cent lower than that of Aird, the result primarily of the assumption of a somewhat more rapid decline in the birth rate (to 27 per 1,000 in 1975); the assumed changes in the death rate are very similar to those by Aird, except that a less sharp rise around 1960 is estimated.

*UN* (most recent, including Taiwan): The methodology for the UN estimates is not explicitly stated (they are, in any case, frequently revised). However, it looks very much as if the most recent series (going back to 1965) was obtained by extrapolating a compound growth rate of 1.68 per cent backwards from a 1974 figure of 825 million. This yields a figure of 710 million for 1965 which is implausibly low, given the

'official' figure of around 640-50 million for 1958, and which still remains on the low side if account is taken of the fact that not just the 'official' 1953 census figure but also the subsequent 1950s' ones were probably overestimates.

The UN figure for 1975 (adjusted for what appears to be the Chinese estimate of Taiwan's population<sup>9</sup>) is 3.6 per cent below Orleans' and 12.3 per cent below Aird's projections. Also, although the UN series' implicit rates of natural increase are not all that different from those for Orleans, the levels of the birth rates and of the death rates assumed are both lower (33.1 per 1,000 and 15.3 per 1,000 respectively for 1965-70).

*UN adjusted* (excluding Taiwan): Given the overall implausibility of the backward extrapolation carried out by the UN, a completely revised series was constructed on the assumptions that (i) the 1975 figure (excluding Taiwan) was 826 million, as in the UN series, and (ii) the implicit rates of natural increase have been as follows: 1949-53, 2.0 per cent; 1954-57, 2.1 per cent; 1958, 2.0 per cent; 1959, 1.8 per cent; 1960-61, 1.7 per cent; 1962-63, 1.8 per cent; 1964-65, 1.7 per cent; 1966-67, 1.6 per cent; 1968-69, 1.5 per cent; 1970-71, 1.4 per cent; 1972, 1.3 per cent; 1973, 1.2 per cent; 1974-75, 1.1 per cent. Up until the mid-1960s, these rates are very similar to Orleans'; the series here differs mainly by assuming a sharper fall in the rates of natural increase since then. This is based on the view that it took time for the impact of later marriage,<sup>10</sup> increased female education and economically active participation in the labour force,<sup>11</sup> improved living standards,<sup>12</sup> contraceptive utilisation and, more recently, baby quotas to affect the birth rate substantially, but that when they did so, the combined effect was very strong.<sup>13</sup>

Of course, the same rates of natural increase can be obtained with many pairs of birth and death rates. And there is reason to suppose that Orleans' figures, adjusted for a somewhat sharper fall in the birth rate, still give both birth and death rates which are a bit on the high side for the later 1960s and early 1970s. Isolated Chinese statements together with visitors' reports suggest that both birth and death rates are currently lower than the Orleans' rates for this period (i.e., 31 and 15 per 1,000, respectively, for

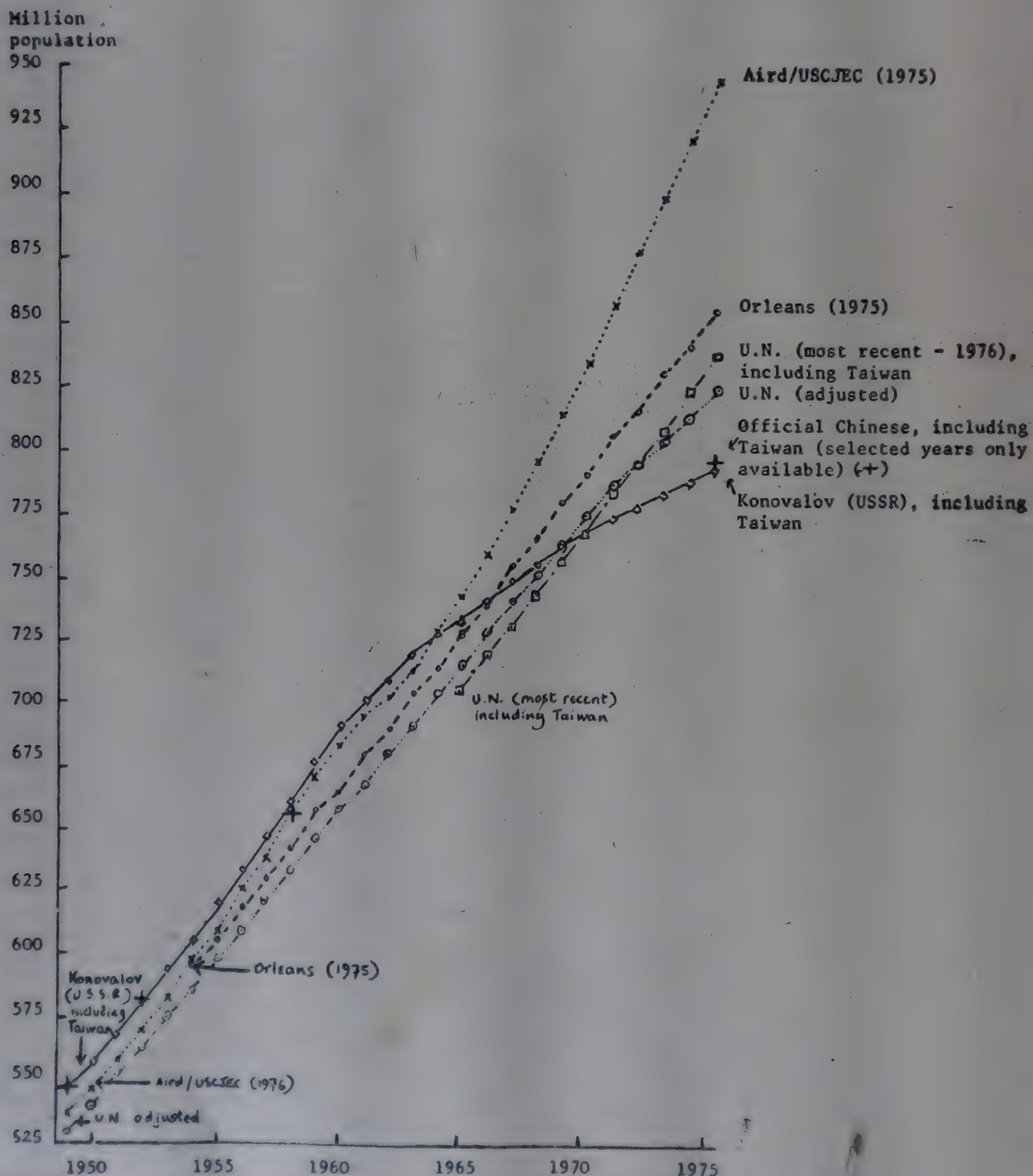


1971, 28 and 13 per 1,000, respectively, for 1974, etc. — see Table A1). For instance, Tien (1975) collates data to show that in the early 1970s, crude birth rates for specified municipalities and for rural communities (in Hopei and Honan, and near Shanghai) showed an impressive overall reduction of over 50 per cent during the previous decade — the rate per 1,000 in 1971 for Peking was 18, Shanghai 12

(inner city 6.93 and suburbs 18), Tientsin 13.6, Peking 8.1, Yueh-ko Chung 22, and Cheng-Kuang 20. His own (carefully qualified) data for 1972-73 on a number of commune production brigades and teams not only confirms this picture (the crude birth rates for less advanced rural communities being 20-30 per 1,000), but also brings out that "whatever the extent of the decline [in the birth rate] may be, the

last four or five years (1969-1972) are the crucial period ... [this is] ... highly consistent with the known advances in family planning services and social and economic reorganisation that China has made". Somewhat lower rates (16-20 per 1,000 in 1971-72) were obtained by Chen (1973) for brigades in Hopei and Honan, and by Ajit Singh and myself in 1973 (13-17 per 1,000 for communes near Canton and

CHART 1.1: ALTERNATIVE ESTIMATES OF CHINA'S POPULATION



Source: See Table A1.



Shanghai).<sup>14</sup> Similarly, statements to visitors about death rates<sup>15</sup> together with the great emphasis on preventive medicine<sup>16</sup> and with the well-attested provision of health services both in the countryside as well as the city, all combine to suggest that death rates have declined somewhat more rapidly than Orleans estimates, though as in the case of birth rates, less advanced areas will not have achieved the absolutely low figures which seem to have been attained, for instance, in many urban areas.

Here it is interesting to note that data from Kerala state in India show that between 1966 and 1973, the death rate fell from 10.5 to 8.7 per 1,000 and the birth rate from 37.4 to 29.9. In some districts, however, the death rate fell as low as 5.5 per 1,000, and the birth rate to 20 per 1,000 (i.e., less than that for certain of the poorer industrialised countries). The main explanation for this appears to be that increased education raised the marriage age, so that there was a sharp decline in fertility in the lowest female reproductive age group.<sup>17</sup> That a similar process has taken place in China is by no means improbable, given that there the impact of raising the marriage age was reinforced by substantial increases in female labour force participation and by significant increases in per capita consumption.<sup>18</sup> A hypothetical pair of series, yielding the UN adjusted rates of natural increase, but also yielding a birth rate of 20 per 1,000 and a death rate of 9 per 1,000 in 1974 is presented under alternative B in Table A1. In fact, the death rate series for 1965-70 corresponds closely to that in official UN publications (yielding an annual average of 15.0 per 1,000 as compared with a UN figure of 15.3 per 1,000), while the birth rate series is somewhat lower (the annual averages for the same period are 33.1 per 1,000 for the official UN and 30.5 for the adjusted UN series).

However, for our subsequent purposes in this paper, it is the net rates of population increase which are relevant. If one accepts the 1974 figure of 826 million (excluding Taiwan) as probably being not all that wide of the mark (it is 4.1 per cent higher than the implicit mid-year 'official' Chinese estimate) and if one accepts that the population growth rate declined only slowly up until the mid-1960s but quite rapidly after that, then the out-

come will be a series much like the hypothetical one constructed here. There is a case (see Paine 1976b) for using lower initial and terminal absolute values, but the intervening growth rates are little affected.

*Konovalov (USSR):* This Soviet source provides a fair amount of unsystematically presented population estimates. These show (a) a population increase of 130 million during the first decade, and of 70 million during the second decade of Chinese development, together with a very rapid fall in the population growth rate from the beginning of the 1960s onwards, (b) a final figure of 780 million (including Taiwan) for an unspecified year early in the 1970s,<sup>19</sup> (c) birth rate which was extremely high during the early 1950s, began to decline slowly during the rest of the decade and sharply thereafter (owing to the increase in the marriage age), and (d) a death rate which declined by 50 per cent (to 12-14 per 1,000 by 1958).<sup>20</sup> An attempt has been made in Table A1 to reconstruct a series corresponding approximately to these requirements (and certain more minor ones).<sup>21</sup>

Note, however, that to get even vaguely plausible rates of change in the population growth rate between the 1950s and 1960s, and to finish up with the required terminal figure, it was assumed that population increased by 85 (not 70) million during the decade from 1959-68. Even so, the growth rate estimates for the post-1959 years are very hard to accept.

*Chinese 'official':* There is a complete Chinese 'official' series only for the years 1949-58. Since then there have been a number of isolated (and at times, apparently contradictory) statements,<sup>22</sup> the most recent of which (by the late Chou En-lai) put the total population at almost 800 million (including Taiwan) in January 1975. That plausible series of births and death rates which produce an outcome not all that different from this has been demonstrated above. Furthermore, the steadily accumulating evidence on the reliability of recent Chinese statistics mean that it cannot be dismissed cavalierly (as is the fashion with certain American demographers). On the other hand, if the Chinese official figures for the 1950s are still accepted, difficulties very similar to those of the Konovalov series arise when an attempt is made to reconstruct the intervening years.<sup>23</sup>

*Clark:* In addition to the series pre-

sented in Table A1, there exists a further (recently revised) series constructed by Colin Clark (1976 and 1966). Essentially, Clark is convinced that since liberation, the Chinese population has been half-starved, and that consequently, birth rates have been low and death rates high. His own (revised) estimates yield population growth rates of 1.6 per cent (1953-58), 0.4 per cent (1958-65), 1.1 per cent (1963-75), with a 1975 population of about 735 million. His 'compromise' estimates (taking into account Orleans' work) yield figures of 1.6 per cent, 0.9 per cent, 1.25 per cent, 1.2 per cent, and 768 million, respectively. But since the weight of the evidence about Chinese agricultural production (see below) shows that the linchpin of his argument falls completely, the series is not discussed in detail here. About the fact that China's population has not grown as fast as certain US demographers claim, Clark is completely right. But the explanation is improved health, welfare, living standards, family planning, women's emancipation, and late marriage, not high death rates, and low birth rates depressed by malnutrition.

Average compound growth rates for the various series are presented in Table 1.1. In our subsequent calculations, a range of calculations using the Aird, Orleans, UN reconstructed, and 'official' Chinese series (where possible) will normally be made (though on occasion just the two middle estimates will be used), since there are no sufficiently objective criteria to select out just one from these alternatives. The Konovalov and UN official series have been rejected on account of the serious difficulties with them explained above.

Finally, it is worth reiterating how China did — and how it did not — manage to reduce its population growth rate. There were no sudden compulsory decrees from above to be enforced immediately on a national basis. Rather, after controlled population growth became a policy goal, the central factor in its attainment was the provision of a socio-economic environment in which population control measures would be voluntarily adopted; in other words, provision of a rising consumption floor (see further below) below which no individual would fall — so that children were no longer a form of economic necessity and



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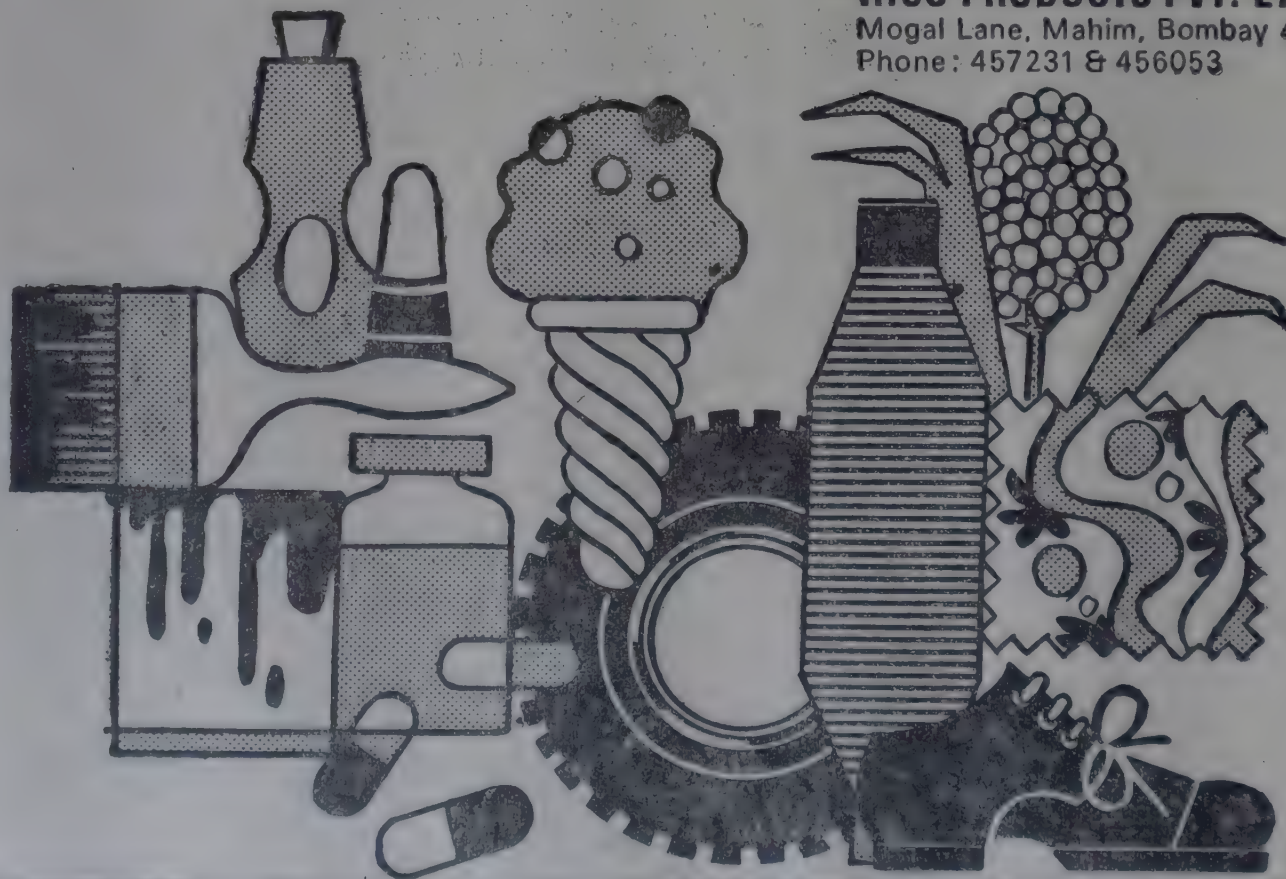
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### 1.5 CHINA'S AGRICULTURAL RECORD

#### *Production of foodgrains*

Table 1.2 presents summary data on China's production of foodgrains since 1949. Although this is a subject on which there was considerable disagreement during the late 1960s and early 1970s,<sup>24</sup> it is one on which there is now particularly strong consensus among Sinologists.<sup>25</sup> The present widespread confidence in the 'official' Chinese estimates, even amongst former US sceptics, must in part be attributed to the reports of a delegation of leading US plant scientists which confirmed Chinese statements about the substantial improvements achieved in agrarian technology.<sup>26</sup> The extent of the consensus about foodgrain production can clearly be seen by comparing columns (1) and (2), which present the series for gross production of foodgrains used in the 1975 USCJEC report, and that 'officially' published by the Chinese and used, for instance, by Eckstein (1973) and Perkins (1975a). Excluding the years 1958-59, for which everyone (including the Chinese) consider their 'official' figures unreliable, the two series differ only during the early 1960s — the 'official' one implying a larger fall in production and slightly slower recovery. Since the USCJEC grain figures enter

into other estimates presented below, and since the correspondence between the two series is close, that one only will normally be used in subsequent discussion and calculations.<sup>27</sup>

Two statistical points about the Chinese data should be mentioned here. The first is that they include not just foodgrains proper, but other crops such as potatoes if they are staples in the regions concerned. These are converted to grain equivalent at a ratio of 4 to 1. (If, as reported in Sinha (1975), the ratio has been raised to 5 to 1, the recent figures will be underestimates.) The second is that the Chinese figures relate to unhusked weight, thus differing from the conventional practice for the presentation of data on foodgrains. The extraction ratio usually used to obtain the husked weight has been 0.80, and this can fairly reliably be regarded as erring, if anything, on the conservative side.<sup>28</sup>

The key features of the Chinese foodgrain production record can now be seen clearly. Firstly, the overall compound output growth rate for the entire post-liberation period (3.5 per cent for 1949-75, or 3.7 per cent if the 'official' Chinese figure of 284 million metric tons is taken for 1975) is comparatively high, particularly by recent international standards. Even if the rate is calculated on a 1949-51-1973-75 basis to eliminate the brunt of the catching up process to prewar levels,<sup>29</sup> its value is still 3.1 per cent (3.3 per cent if the 'official' terminal year figure is used).<sup>30</sup> Secondly, however, growth has been somewhat uneven. The high growth of the early 1950s declined during the second half of the decade, to be terminated abruptly by the 'three bad years' when, primarily on account of unprecedentedly appalling weather conditions, absolute output levels fell (by 20 per cent over two years). Then there followed a period of rapid recovery and further sustained expansion — growth rates for the periods 1963-67, 1963-70, 1963-75 were 5.4 per cent, 3.9 per cent, and 3.1 per cent (3.6 per cent with the 'official' 1975 figure), respectively — all higher than the 2.3 per cent attained during the First Five-Year Plan (1952-57). Here it is particularly important to note China's success in applying the lessons from the bad experiences at the end of the 1950s and so in eliminating very substantially adverse output fluctuations. Since 1960, output has only fallen twice — by 6.5 per cent in 1968 and 2.5 per

cent in 1972. This achievement can perhaps best be appreciated when set against the experience of South Asian monsoon agricultures. For instance, since 1960, Indian agricultural output has fallen below the level attained in the previous year in six crop years, three of these occurring since 1970, and one (1964-65) recording in one year a loss of 20 per cent, i.e., as much as the (probably overestimated) notorious decline in China over the two years 1958-60; furthermore, continuing the comparison, the relative Chinese success at reducing output instability was accompanied by higher overall growth — the compound rates for 1964-75 (to exclude the high Chinese recovery rates of the early 1960s) were 2.9 per cent (3.4 per cent) and 2.6 per cent for China and India respectively.<sup>31</sup> Thirdly, growth in China's foodgrain output was achieved with only a rather modest increase in the area cultivated. Precise data on either acreage cultivated with foodgrains or on total area cultivated in 1949 do not exist. Buck (1973) estimates that for 1929-33, the total amounted to 112 m hectares, while Perkins (1969) puts it at less (98m in 1933). The "Ten Great Years" gives 107.9m in 1952, 111.8m in 1956, and 107.8m in 1958 (the decline being the result of a policy decision to concentrate on increasing yields over a smaller cultivated area). Since then, land has been added through reclamation schemes, etc.,<sup>32</sup> but also removed to make way for houses, roads, factories, etc. The outcome is not at all clear, and the issue is further confused by the existence of two inconsistent estimates for the early 1970s — 106.7m ha, and, 127 m ha (see Stavits 1976). Probably the current figure Stavits himself uses of 120 m ha is not far of the mark. In any case, it seems to have increased by about the same order of magnitude as the area sown to foodgrains in India which rose from 118.7 m ha in 1950-51 to 139.4 m ha in 1973-74.<sup>33</sup> Fourthly, China's foodgrains' growth was achieved despite the already high degree of multiple cropping before liberation. Buck calculated a double cropping index (for all crops) of 149 for 1933; the "Ten Great Years" put it at 131 in 1952 (and 145 by 1958). In contrast, the Indian index was 111 in 1950-51 (and still only 118 in 1971-72). Of course, this more intensive Chinese utilisation of land derived historically from a more unfavourable land-labour



TABLE A1 : ALTERNATIVE ESTIMATES AND PROJECTIONS OF CHINESE POPULATION AND ASSOCIATED CRUDE BIRTH AND DEATH RATES

TABLE A1 : ALTERNATIVE ESTIMATES AND PROJECTIONS OF CHINA'S POPULATION AND PROJECTIONS																				
Total Population (Million, Mid-Year)			Annual Rates of Natural Increase (Calendar Year Basis)			Crude Birth Rates (Calendar Year Basis) Per 1000			Crude Death Rates (Calendar Year Basis) Per 1000											
AIRD USCJEC (1975)	Orleans	UN* (Most Recent)	UN Adjusted	Konovalov* (USSR)	Chinese†* 'Official'	Clark 1976	AIRD/USCJEC (1975)	Orleans	UN	Adjusted	UN*	Konovalov* (USSR)	Chinese 'Official'	AIRD/USCJEC (1975)	Orleans/UN Adjusted A	UN Adjusted B	UN*	Konovalov* (USSR)	Chinese 'Official'	
																				A
1949	538		529	549	549		1.8	43	43	43									26.28	
1950	547		540	558	570		2.0	42	42	42				37.0	22	22	22			18.0
1951	558		551	569	570		2.1	41	41	41				37.0	21	21	21			17.0
1952	570		562	581			2.2	40	40	40				35.0	20	20	20			13.0
1953	583		573	594	596	583	2.3	39	39	39				32.0	19	19	19			12.4
1954	596	594	584	607			2.4	38	38	38				34.0	19	19	19			11.4
1955	611	607	597	620			2.4	38	38	38				17.6	20	20	20			11.0
1956	626	619	609	634			2.5	38	38	38				19.2	21	21	21			
1957	641	632	622	648	641		2.6	38	38	38				23.7	21	21	21			
1958	657	645	635	663	657	635	2.4	38	38	38				24.9	21	21	21			
1959	672	657	647	679			2.2	37	37	37				23.0	20	20	20			
1960	685	668	658	692			1.6	37	37	37				19.1	19	19	19			12.14
1961	695	680	669	703			1.3	37	37	37										
1962	704	962	681	713			1.5	37	37	37										
1963	716	706	694	722		664	1.9	37	37	37										
1964	731	717	706	730	<680/		2.1	36	35	35				17.5	18	18	18			
1965	747	730	718	738	690		2.2	35	34	34				16.7	17	17	17			
1966	763	743	730	745	700		2.3	34	33	32				16.2	17	16	16			
1967	781	755	742	752			2.3	34	33	31				16.1	17	15	15			
1968	798	768	754	758			2.3	34	32	30				16.1	17	15	15			
1969	817	781	765	764			2.4	33	31	29				15.9	16	14	14			
1970	837	794	776	770		724	2.4	32	30	27				15.5	16	13	13			
1971	857	807	787	775	750-		2.4	31	29	26				14.9	15	12	12			
1972	878	819	798	780			2.4	30	28	24				14.5	15	11	11			
1973	899	831	808	785			2.4	29	26	22				14.5	14	10	10			
1974	920	844	817	790			2.4	28	24	20				13.7	13	9	9			
1975	942	857	826	795	800	768	2.4	27	23	19				13.2	12	8	8			
1976	964	871	835	800			2.4	26	23	19				12.9	12					See Text

\*Including Taiwan † Time of year unspecified.

Sources and Methods of Estimation, Projection and Reconstruction on facing page.



Table A1: Sources and Methods of Reconstruction:

*Aird*: The estimates of JS Aird are described in L A Orleans, 'China's population—can the contradictions be resolved?' USCJEC (1975), pp 69-80. *Orleans*: These estimates are presented in L A Orleans, *ibid*.

*UN*: The estimates given are those presented in the *UN Monthly Bulletin of Statistics*, June 1976. (A slightly different series was used before June 1975). *UN: Adjusted*: This was obtained on the assumption that the UN 1975 figure (after Taiwan has been excluded) is correct, and that the growth rates since 1949 have been as follows: 1949-53 2.0 per cent; 1954-57 2.1 per cent; 1958 2.0 per cent; 1959 1.8 per cent; 1960-61 1.7 per cent; 1962-63 1.8 per cent; 1964-65 1.7 per cent; 1966-67 1.6 per cent; 1968-69 1.5 per cent; 1970-71 1.4 per cent; 1972 1.3 per cent; 1973 1.2 per cent, 1974-75 1.1 per cent. Two hypothetical sets of birth and death rates yielding these growth rates are presented for illustrative purposes: alternative A gives Orleans' death rates, together with his birth rates up until 1964, and a somewhat more sharply declining series subsequently; alternative B gives more sharply declining series in both cases, yielding birth and death rates of the same sort of magnitude as have been observed in certain districts of Kerala state in India. *Chinese estimates*: 1949-58 are from the State Statistical Bureau, 'The Ten Great Years', Peking 1960. The 1975 figure was given by Chou En-lai to the National Congress in January 1975.

*Kononov*: The English translation of Kononov's estimates is published in M I Sladkovsky *et al*, 'Present-day China', Moscow, 1975; however, according to Orleans (1975) it was originally published under the same title (Socio-economic aspects of the population problem in the PRC) in the original Russian version of the same book (*Sovremennyy Kitay*) in 1972.

Kononov states the following about China's population:

- (i) It increased (a) by 130m during the first decade after liberation, and (b) by 70m during the second one.
- (ii) It was 780m at the time of writing (between 1970 and 1972).
- (iii) The birth rate was as high as 40 per 1000 during the late 1950s, but declined substantially during the second one, mainly because of deferred marriages, which reduced births by 30-35 per cent (7-8m a year).
- (iv) The death rate fell by half, to 12-14 per 1000 by 1958.
- (v) The growth rate during the first decade was 'more than 2 per cent', and the annual average absolute increase was 14-16 million. At the time of writing, the growth rate was 'one of the world's lowest', while 'in some years', it had increased by no more than 0.5 per cent (p 70).

Assumption that, like Aird and Orleans, Kononov accepts the Chinese official 1949 figure, it is impossible to construct a series with all these characteristics. (In any case, some are inconsistent—e.g., a total increase of 130 million during the first decade, and an average annual increase of 14-16 million during the same period.\*) The reconstructed series in the Table satisfies (i) and (ii), and is consistent with (iii) and (iv). However, growth during the second decade was taken to be 85 million (so as to obtain a reasonably plausible series linking 679 million in 1958 with 780 million in 1972—taking the 780m to refer to an earlier year would have made the task almost impossible). Secondly, in no year was growth taken to be as low as 0.5 per cent although it was necessary to use a figure as low as 0.6 per cent which implies a birth rate of 18-20 per 1000 even if the death rate remained at the 1958 value and fell no further. Thirdly, the annual average absolute increase during the 1950s was taken to be 13m, instead of 14-16. This seemed more reasonable than increasing the total increase to 150m, since that procedure would have implied even lower growth rates during the 1960s if the 780m terminal figure was to be attained. The estimates for the years after 1972 were based on the assumption that the growth rate remained the same.

\* Also an increase of 130m over a base of 549 million implies an annual average compound growth rate of 2.1 per cent, not 2 per cent.



TABLE 1.1: ALTERNATIVE ESTIMATES OF THE GROWTH OF CHINA'S POPULATION  
(AVERAGE COMPOUND RATES)

	Aird/ USCJEC 1975	Orleans	UN (most recent) (including Taiwan)	UN Recon- structed	Konovalov (USSR) (including Taiwan)	Konovalov Recon- structed	Chinese 'Official'
1949-58	2.2	2.0	—	2.0	2.1	2.1	2.0
1949-75	2.2	1.8	—	1.7	—	1.4	1.5
1958-70	2.1	1.7	—	1.7	1.0 <sup>a</sup>	1.0	—
1970-75	2.4	1.5	1.7	1.2	—	0.6	—
1975 total	942 <sup>b</sup>	857 <sup>b</sup>	839 <sup>b</sup>	826 <sup>b</sup>	—	795	800 <sup>c</sup>

Notes: a 1959-69 b mid-year c January

Source: See Table A1.

ratio — 0.19 hectares in 1952 as compared with 0.33 hectares in India (1951).

Further light on China's agricultural performance is obtained examining per capita production data. Chart 1.2 really speaks for itself. Whichever population estimate is used, after 1951 per capita production (husked) only fell below 200 kg per annum during the three bad years, and has now, on either of the 'middle' population series, reached quite a high level (250-260 kg husked, 313-325 kg unhusked), particularly when considered in an international perspective. Perkins (1969) provides comparative data from 38 countries for the period 1957-59 (where data were available). He takes Chinese grain output in 1957 at 286 kg (unhusked) and finds that

"From these international comparisons, it is apparent that the available grain supply per capita in China in the twentieth century was quite high by world standards. In fact China ranks (in 1957-SHP) with such countries as Italy, Japan, Syria, ... Greece, Brazil and the UAR, most of whom had much higher per capita incomes than China. In terms of husked grain consumption per person, China ranks below only Japan (in 1934), the UAR, Turkey and Yugoslavia [out of the 38 countries covered, most of which were industrialised or semi-industrialised — SHP]. Most nations normally thought to be at comparable level of development with China turn out to consume 10-30 per cent less grain than China."

He then discusses possible explanations for China's relatively high level of grain consumption, e.g., climate, adult height, bone structure, etc., continuing:

"But when all these qualifications are made, it is difficult to avoid the conclusion that the Chinese population on the average in 1957 had about as much grain as they could directly consume ... This conclusion may seem odd given that grain was rationed in China in 1957. But ... people seem to have been able to buy all the grain they needed. Even a drop in per capita availability of

grain in 1960 of some 20 per cent from the levels of 1957, for example, did not cause starvation in China, at least not on any scale." (Perkins goes on to argue that in so far as there was malnutrition in China during the 'three bad years', it was more to do with shortages of edible oils, sugar and other similar foods than with shortages of grain.)

Finally, he points out that grain production above 300-350 kg per capita (unhusked) would be used to feed hogs or draft animals — the former being precisely what seems to have happened during the last decade: the 300 kg level reached in 1967 coincided with the beginning of a period during which hog production has risen sharply (see further below).

The Chart also shows some interesting points of comparison with the Indian experience. Taking 1949-50, both countries had approximately the same per capita production of foodgrains (about 150 kg in India and 170 kg in China). Yet after 1951 in only four years (1960-61, 1964-65, 1971-72 and 1975-76) did Indian per capita production exceed the most unfavourable estimate for any year in China (187-191 kg, in 1960, using the middle population series); and over the same period, and again using the middle series, there have only been two years (1960-61) when Chinese production has fallen below the Indian peak.<sup>34</sup> Readers may wonder why this did not come out in Swamy's study (1973), but the answer is simple: although he discusses the Chinese per capita experience (and although he presents a total of 25 tables on Indian and Chinese agricultural performance), he nowhere includes explicit data on Indian per capita production.

At this point, the oft-repeated charge by China-critics that per capita foodgrain production is still, or has usually been, below that attained before liberation can be examined. The average

for 1931-37 (considered 'normal' years) was 607.5 kg (unhusked) or 246 kg (husked) (Perkins 1969). This was regained before the Great Leap Forward, and achieved again in the mid-1960s, from which time it has been increasingly exceeded (with the exception of 1968-69). However, given (1) the relatively high level of per capita output now achieved, and (2) the achievement not just of national self-sufficiency in foodgrains, (see next paragraph), but also of self-sufficiency in what are key — but what historically have been grain deficit — provinces, it is likely that the Chinese will concentrate even more on improving the national diet by diversifying agricultural production, by changing the composition of future total foodgrain supplies (e.g., replacing roots and tubers by quality grains), and by using increments to inferior varieties for animal feed.

Finally, growth in China's foodgrain output meant that by the early 1970s, national self-sufficiency was attained. In fact, the Chinese became net exporters on food account in 1965-66 (Usack and Batsavage 1972), but have only claimed self-sufficiency on the foodgrain account for the last three years or so. For instance,

"China does not rely on imports for feeding the population. The main purpose of our imports is to change food varieties. In about three years from 1972 up to now, we have imported over 2 billion \$ US worth of grain, mainly wheat. In the same period, we have exported grain, mainly rice, valued at the same amount." (Speech by Hao Chung-shih at the UN World Food Conference, reported in *NHNA*, November 8, 1974.)

As Chen (1975 b) points out, this statement by Hao is consistent with data from other sources on China's trade in foodgrains (p 626). One of the reasons why previously this self-sufficiency has normally not been brought out in very recent detailed Western statistics on Chinese trade is that these have not achieved comprehensive country coverage, tending to omit precisely those less developed and socialist countries which are the probable recipients of Chinese rice exports. Chinese participation in international trade in foodgrains still continues, mainly because hinterland transport costs make it more expensive for deficit areas to import from surplus provinces than from abroad, and because Chinese dietary tastes encourage ex-



TABLE 1.2: CHINESE TOTAL AND PER CAPITA PRODUCTION OF FOODGRAINS

Year	Total Production of Foodgrains (MMT)			Per Capita Husked Output of Foodgrains		FC Husked Output of Foodgrains (Gm/Day)		Per Capita Calories Per Day Provided by Net Domestic Foodgrain Production	
	USCJEC (1975)	'Official' Chinese Perkins/Eckstein	(Swamy) (1952-70 only)	USCJEC 'Official'	Per Capita Husked Output of Foodgrains		FC Husked Output of Foodgrains (Gm/Day)		Per Capita Calories Per Day Provided by Net Domestic Foodgrain Production
					Aird	Orleans adjusted	UN adjusted	Konovlov*	
1949	108	108		86	161	163	157		1502
1950	125	125		100	183	185	179		1603
1951	135	135		108	194	196	189		1697
1952	154	154	154	124	218	221	213	217	1913
1953	157	157	157	126	216	220	212	215	1906
1954	160	160	161	128	215	219	211	217	1895
1955	175	175	175	140	229	235	225	230	2036
1956	182	182	183	146	233	240	230	235	2079
1957	185	185	186	148	231	238	228	234	2061
1958	200	(250)	216	(200)	244	252	241	266	2180
1959	165	(270)	193	(216)	196	204	194	233	1765
1960	160	150	161	120	187	195	185	191	1686
					(175.2) <sup>e</sup>	(180) <sup>e</sup>	(173.4) <sup>e</sup>		
1961	160	162	189	128	184	191	183	219	1653
1962	180	174	204	144	205	212	203	231	1834
1963	185	183	219	148	207	213	207	242	1845
1964	195	200	238	156	213	221	214	258	1913
1965	210	200	240	168	225	230	231	254	2025
1966	215	—	220	172	225	232	234	228	2061
1967	230	230	231	184	236	244	248	234	2148
1968	215	—	—	172	215	228	231	—	1975
1969	220	—	—	176	215	225	234	—	1989
1970	240	240	240	192	229	242	249	228	2137
1971	246	246	—	197	230	244	250	—	2162
1972	240	240 <sup>c</sup>	—	192	219	234	251	—	2087
1973	250	250 <sup>c</sup>	—	200	223	241	259	—	2137
1974	259 <sup>a</sup>	275 <sup>d</sup>	—	207	225	245	262	—	2188
					(234) <sup>e</sup>	(261) <sup>e</sup>	(279) <sup>e</sup>		
					227	250	369		(2329) <sup>e</sup>
1975	268 <sup>b</sup>	284 <sup>d</sup>	—	214	(241) <sup>e</sup>	(265) <sup>e</sup>	(286) <sup>e</sup>		2162
									(2292) <sup>e</sup>
									(2379) <sup>e</sup>

## Growth Rates:

1949-75	3.5	3.7	1.3(1.6)	1.8(2.0)	2.1(2.3)
1952-57	2.3			1.5	
1952-58/9	1.8			0.5	
1958/9-1966	1.6			0.6	
1963-1970	3.9			2.1	
1952-1970	1.9			0.6	
1957-1970	1.8			0.3	
1963-1975	3.1(3.6) <sup>e</sup>			1.6(2.1) <sup>e</sup>	
1952-1975	2.4(2.7) <sup>e</sup>				

a. Figure given by Perkins in USCJEC (1975); Field (1976) uses 255-60; Stavits (1976) uses 257. b. Estimated from Chinese 'official' figure by same method as Field (1976) used for 1975. c. Perkins and official only d. Official only e. Figure in bracket uses 'official' Chinese production figure. Field (1976) argues that in 1974 and 1975, this includes soyabeans, and proposes the lower (unbracketed) figures to adjust for this.

Sources: See text.



port of rice for wheat, but also so as to honour international commitments and, when possible, to take advantage of grain price differentials to increase domestic stocks (current reserves being put at at least 80 million tons).

#### Total agricultural production

Neither an index of total agricultural production nor data on all the individual components of such a series exist. Available data on cotton, hogs and vegetables are given in Table 1.3,<sup>35</sup> together with Perkins' estimates of the gross value of non-grain and of the gross value of farm output. This shows since 1949, cotton and timber output and the stock of hogs have grown much more rapidly than foodgrains, and that vegetable production must almost certainly have done so as well. Perkins (1975 a and b) has attempted to construct an index of the gross value of non-grain and of total farm output (using a 1957 base), and this shows that for the period 1957-71, the value of non-grain grew somewhat more rapidly than that of grain output.<sup>36</sup> His figure for 1974 non-grain output is probably an underestimate, since it is calculated on the assumption that between 1970 and 1974, grain and non-grain output grew at the same rate. However, during this period, the Chinese have been putting considerable emphasis on agricultural diversification (*vide*, for instance, the particularly rapid rise in the stock of pigs of 36.3 per cent over the 3 years 1972-75).

In the absence of a complete agricultural production index, no detailed international comparisons are possible. However, since the foodgrains index grew more slowly than total output, this can be used to give some *minimum* indication of China's comparative experience, and this is shown in Table 1.4. China's post-liberation production performance was slightly better than that for all market LDCs and for continental subgroups taken separately over the period 1952-73.<sup>37</sup> However, in per capita terms, China did very substantially better, achieving a compound annual growth rate of 1.3 per cent for the period 1949-52-1970-75, as compared with a rate of 0.4 per cent for all market LDCs (1952-73), and 0.5 per cent, 0.2 per cent and 0.3 per cent for the Asian, Latin American, and West Asian subgroups, respectively.

#### 1.6 CHINA'S INDUSTRIAL RECORD

Table 1.5 presents the most recently revised index of industrial production computed by R M Field of the US Central Intelligence Agency, and the index which is obtained if Chinese official statements are used without adjustment (Field 1975). Field's index is constructed from data on 27 commodities, while the coverage of the official one is comprehensive, including in addition both military hardware and the repair of machinery and equipment, which Field excludes from his. Secondly, whereas the official index gives the gross value of industrial output as obtained from the 'factory reporting' method, Field's is an attempt to estimate industrial value added using the share of the wage bill in value added (1956) as weights. According to the 'factory reporting' method (which is also used in the USSR), enterprises report the gross value of their output in constant prices, net of intra-enterprise transfers, but not deducting costs of raw materials or semifinished inputs purchased by individual enterprises, and not deducting capital depreciation. These are then aggregated on a provincial and on a national basis.<sup>38</sup> It has often been argued that the double-counting involved in this procedure leads to growth rates which are significantly different from those obtained by the value added procedure.<sup>39</sup> However, it appears that such Western criticisms of the gross value method have been overstated. As Field, Lardy and Emerson point out (1975, Appendix B)

"A comparison of gross value and value added indexes applied to the same data bases is made in E Domar, 'An index number tournament'... (1967). Domar declared a draw in this contest, noting that he had fully expected the gross value index to be badly beaten. From Domar's tournament it is clear that the deficiencies attributed to the gross value index by Western scholars and noted by Soviet economists have not been given theoretical underpinnings." (Italics mine.)

It is therefore not surprising that the two indices correspond quite well. As Field (1975, p 147) summarises the situation,

"In the 1950s, when 1952 constant prices were used to compile the official data, the official indexes are higher than mine, branch by branch, and thus appear to have a consistent upward bias. In the 1960s and 1970s, when 1957 prices were used, the indexes are quite close."

Moreover, he goes on:

"I have tentatively concluded, however, that the current gross value indexes are a reasonable measure of output. The two indexes should be used together, the official index with complete coverage but methodological deficiencies and my index with restricted coverage but a methodology closer to the practice of Western countries." (Italics mine.)

Since strong arguments for using the Chinese official data as they stand were made by Rawski (1973), who convincingly refutes many of the charges which have been made against Chinese industrial statistics,<sup>40</sup> both series are presented in most subsequent calculations. (Rawski's own series, based on official data, is not reproduced here as it uses 1952 prices and so is not comparable with the revised Field estimates.)

One further statistical point needs to be mentioned before the performance represented by the data of Table 1.5 is evaluated. Before Rawski and Field-Lardy-Emerson had completed their work,<sup>41</sup> Swamy (1973) argued that biases in the Chinese data were so severe that the entire index had to be recomputed, and that this should be done using 1956 Indian value added shares. (This would also, in his view, facilitate his China-India performance comparison.) Using this method, the annual compound growth rate in industrial output between 1952 and 1970, for instance, was 8.2 per cent — which compares with 10.4 per cent for the revised Field, and 10.8 per cent for the official series. That the Chinese data reflect their country's industrial performance without any such adjustment has already been argued above. But in any case, if the 1960 weights which have been used since then to construct the Indian index of industrial production are applied to the Chinese data, this leads to a slightly higher Chinese industrial growth rate than is obtained from using the Field (1975) weights, as can be seen from Table 1.6.

Table 1.5 shows that the average annual compound growth rates for 1949-75, 1950-75 and 1952-75, respectively were 13.1 per cent, 11.9 per cent and 9.6 per cent respectively, using the Chinese official series, and 12.3 per cent, 11.1 per cent and 8.9 per cent respectively, using the Field series. As in the case of agriculture, progress has been uneven, with extremely high growth rates of the order of



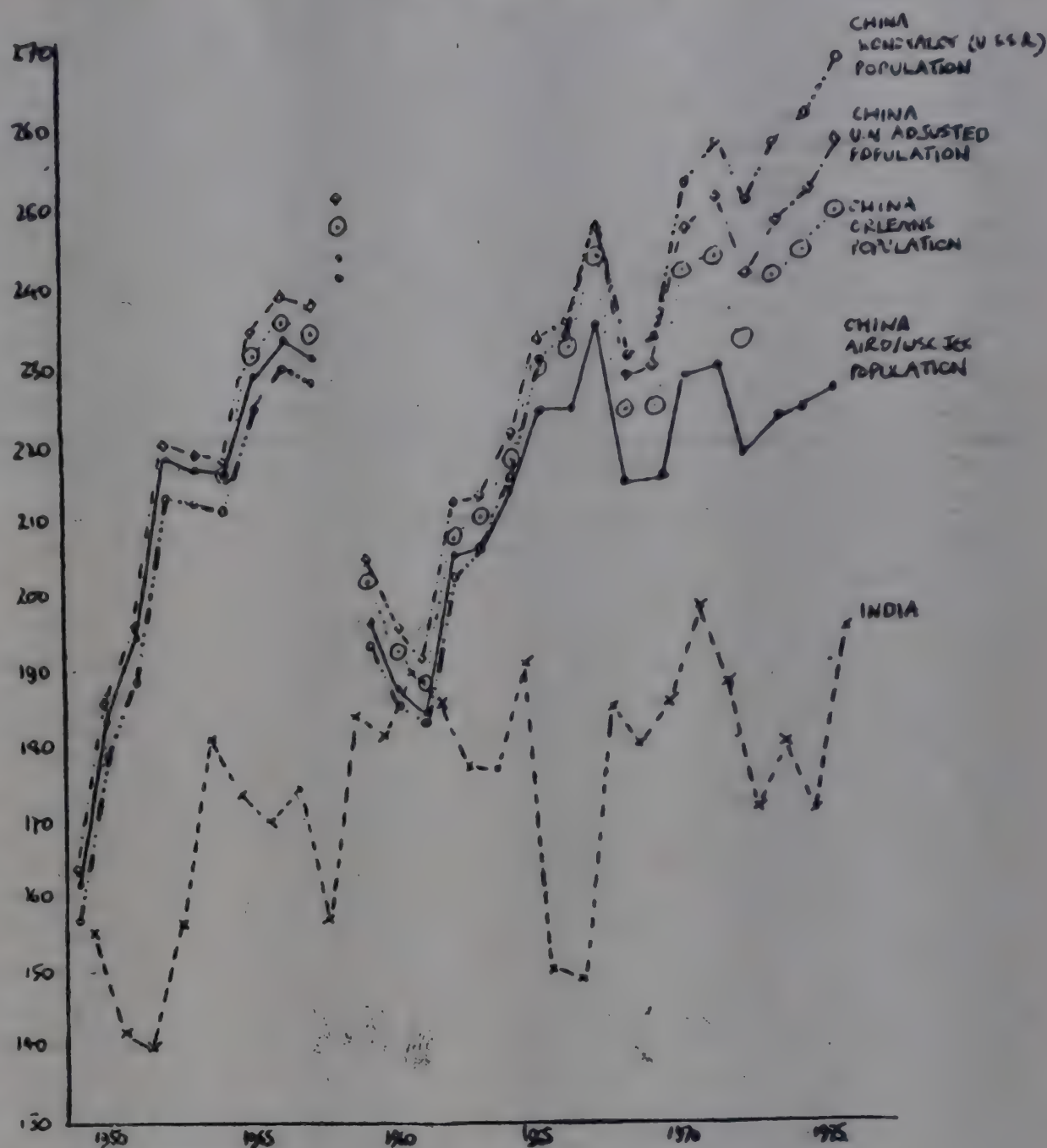
20 per cent or more during the 1950s, a two-fifths decline during the Soviet withdrawal of 1960-61, followed by increasingly rapid recovery, a slight decline at the beginning of the Cultural Revolution, and rapid expansion since then. Producer goods output grew particularly rapidly (the annual compound rate for 1949-73 was 14.7 per cent) and the machinery sub-group more rapidly still, while consumer goods still managed the very respectable compound rate of 10.3 per cent per annum during the same period.

This performance record compares strikingly with that of India's 5.7 per cent compound growth rate of industrial production over the period 1950-75 (5.1 per cent for 1960-75);<sup>42</sup> it also compares favourably with the 7.2 per cent annual average growth rate in industrial activity between 1960 and 1973 for south and east Asian developing market economies. On the other hand, it is not outstanding when compared, for instance, with the rates achieved in the early Soviet five-year plans, in Japan and in certain East European economies since the war, and in a number of 'exceptional' LDCs such as South Korea, Singapore, Taiwan province, Iran, etc — though instances of economies which have attained annual compound industrial rates higher than 12-13 per cent — or even 10 per cent — during a period as long as 25 years are much less frequent.<sup>43</sup>

### 1.7 CHINA'S OVERALL GNP AND CONSUMPTION PERFORMANCE

Since we have so far been primarily concerned with the Chinese production record, discussion of valuation issues has been kept to a minimum. However, examination of the other side of the story — what has happened to consumption standards — means that such issues must now be raised: to know the fate of per capita consumption it is necessary to know that of per capita GNP. But appraisal and use of different methodologies for calculating Chinese GNP is an enormous subject in its own right, raising not just the question (touched on above) of transforming agricultural and industrial output data into value added form, but also that of estimating tertiary sector value added and, for purposes of comparison with both other estimates and other countries, that of exchange rate conversion; consequently, because of space limitations here, we work exclusively with the estimate which is not

CHART 1.2: PER CAPITA PRODUCTION OF FOODGRAINS (HUSKED WEIGHT) CHINA AND INDIA, 1949-75



Source: Table 1.2.

just that by far most widely used by Western Sinologists, but which also is the *only* one to be fairly up-to-date,<sup>44</sup> i.e. USCJEC 1975.

The completely undoctored USCJEC estimate is presented in line 1 of Table 1.7. The methodology used by the Committee to construct this (described in full in their 1972 Assessment) is as follows: Firstly, an agricultural production index was calculated by combining the foodgrains series (adjusted slightly during the 'three bad years' to make it a proxy for a series for all food) and the cotton production series in the ratio 85:15; secondly, twice this agricultural production index was added to the Field industrial production index, and the sum used as a GNP index; thirdly, this index series was converted to a series in US dollars through the use of the calculated dollar value of Chinese GNP in 1955, and the outcome presented in terms of 1973 US dollars.

Table 1.7 shows that the estimates

obtained by using this methodology yield compound growth rates of 6.4 per cent over the period 1950-74, and 5.5 per cent over 1952-74. An adjusted series was also calculated, using exactly the same methodology, but substituting the Chinese official data on industrial production and on foodgrains (as presented in Tables 1.2 and 1.5). This is presented (for selected years) in line 2, and yields growth rates of 6.7 per cent and 5.8 per cent for the corresponding periods. Lines 7-14 of the Table give the alternative per capita GNP estimates which follow when each of the two GNP estimates of the first two lines are combined with each of the four population series listed below. Over the periods 1950-74 and 1952-74, the alternative growth rates range from 4.3 per cent to 5.3 per cent and from 3.3 per cent to 4.5 per cent, respectively. For the reasons explained above, population series B followed by D, is the most plausible, while C and D have serious defects. The choice between the two



TABLE 1.3: INDICATORS OF TOTAL CHINESE AGRICULTURAL OUTPUT

	Cotton		Vegetables Index 1957=100 (Perkins)	Hogs Index 1949=100 (Perkins)	Timber Index 1949=100	Gross Value of Farm Output (Perkins)		Gross Value of Non Grain Output (Perkins 1975)	
	(MMT)	Index				M. 1967 yuan	Index 1957=100	M. 1957 yuan	Index 1957=100
	Perkins Official	1949=100 Erisman							
1949	0.44	0.44	100	100	100				
1957	1.64	1.64	373	166		53,700	100.0	23,730	100.0
1960	1.02	0.90	205			37,420	69.7	13,120	55.3
1962	1.03	1.00	227	114		42,400	79.0	14,210	59.9
1965	2.10	1.90	432			58,960	109.8	26,560	111.9
1970	—	2.00	455	162		72,000	134.1	33,120	139.6
1971	2.22	2.20	500			73,800	137.4	33,950	143.1
1972	—	2.10	477	330					
1974	—	2.50	568			(77,700)*	144.7*	35,750*	150.7*
1975				450*	520†				

\* Estimated by Perkins on the assumption that the gross value of farm output between 1970 and 1974 grew at the same rate as grain output.

† News from Hsinhua News Agency, 27 November, 1975.

Note: Isolated data on certain other commodities are provided in *Peking Review*, 1, January 2, 1976.

Source: Perkins (1975 a and b), Erisman (1975).

GNP series depends on whether or not Field's industrial production series is preferred to the Chinese official one, and whether or not his argument that recent Chinese foodgrain statistics include soyabeans is accepted. An intermediate position on the question of the GNP series, together with population series B, implies a per capita growth rate of around 4.85 per cent for the period 1950-74.<sup>45</sup>

The above data on per capita GNP can be combined with Perkins estimates of the share of gross domestic capital formation in GDP to give estimates of per capita consumption.<sup>46</sup> When product is measured in terms of 1952 prices, Perkins estimates the shares of GDCF in 1952, 1957 and 1970 at 19.5 per cent, 23.5 per cent and 31.5 per cent respectively; using 1957 prices (which give a lower relative value to new rapidly growing producer goods industries), the shares for 1957 and 1970 are 21 per cent and 28.5 per cent. Taking into account the available information on the different growth rates in the value of investment goods when 1952 and 1957 prices are used, an estimate for the share of GDCF in 1952, when product is valued at 1957 prices, can be obtained (19.0-19.2 per cent).

If the adjusted UN population estimate is used, the annual compound growth rates in per capita consumption over the period 1952-74 work out at 3.5 per cent and 3.1 per cent for the USCJEC adjusted and unadjusted output series, respectively. (The more implausible extremes which can be obtained are 2.6 per cent from p c GNP series 1D, and 3.8 per cent from series 2A; the average for all p c GNP estimates is 3.25 per cent, with only one (1D)

falling below 3 per cent). Thus the 'summary' total consumption statistic which this procedure produces is a 3.3 per cent growth rate for 1952-74 (with a probable minimum of 3.0 per cent).

It is immediately apparent that this compares very favourably with the Indian experience, where over the period 1950-74 per capita consumption has grown at somewhat less than the per capita income growth figure of 1.2 per cent. Given the Chinese output data used above, the share of Chinese GDCF in GDP would have had to rise to about 60 per cent by 1974 to produce a per capita growth rate in total consumption of the same order of magnitude as the Indian one.

The information required to construct a series for Chinese personal consumption do not exist. However, although some downward adjustment to per capita consumption levels is required, it is unlikely that the appropriate adjustment to p c consumption growth is substantial. This is firstly because the Chinese communists have always been wary of creating an increasingly expensive bureaucracy, and, as a result of the Cultural Revolution, took strong measures to prune such a one as had emerged by that time. Secondly, available evidence suggests that government consumption expenditure for military purposes has not been expanded by significantly cutting back growth in personal living standards. Jamies (1965) shows that, after Chinese defence expenditure was stepped up after the Soviet withdrawal, military procurement rose *pari passu* with industrial production up until 1970-71, when it tailed off sharply: the annual growth rate for military

procurement between 1961 and 1970 was 8.5 per cent. Assuming that the share of defence expenditure in GNP in 1974-75 was about 9 per cent (USCJEC estimate 'less than 10 per cent'), then a back of the envelope calculation gives a defence share in GNP in 1961 of around 8 per cent. This clearly necessitates only a very slight downward adjustment to the total consumption per capita growth rate to turn it into one for personal consumption.

The above estimates, however, all substantially understate Chinese national income and associated concepts. This occurs as a result of the crude methodology applied to evaluate the GNP. Firstly (though less importantly) basing the agricultural production index on grain and cotton alone removes certain of the commodities which have recently been growing particularly rapidly as a result of the agricultural diversification policy. Secondly, the weights used take two of agriculture (the comparatively slow-growing sector) to one of industry (the more rapidly growing one). For while it is not unreasonable to assume that the tertiary sector did not grow as fast as industry, it is so to treat it essentially as an extension to the agricultural sector. In any case, there can be no doubt that the structure of Chinese GNP changed significantly during the period under consideration in terms of 1957 prices, the share of agriculture fell from 48 per cent in 1952, to 46 per cent in 1957, to 36 per cent in 1964, to 32 per cent in 1970, and to 29 per cent (estimated) in 1974 (figures, excluding estimate, from Perkins, 1975a). The USCJEC



methodology not only ignores such changes in economic structure, but selects such a weighting combination at the faster growing parts of it to give an unduly low influence. Indeed, even using Perkins' estimates in terms of 1957 prices, the share of industry has risen from 26 per cent in 1952 to 42 per cent in 1957, 43 per cent in 1964 and 48 per cent in 1970, with an estimated 53 per cent (by the current author) for 1974. There is therefore good reason to consider that the GNP index obtained by the USCJEC understates Chinese output growth.<sup>47</sup> Space precludes presentation of alternative estimates here, but the key point to note is that modification of the USCJEC methodology to take account of these points renders as feasible much higher estimates of Chinese GNP and per capita consumption growth.

The question which must now be in the forefront of the mind of the China sceptic is how is it that these results differ from those of others such as Subramanian Swamy (1973) and Colin Clark (1976). We discuss this in full in the longer version of this paper, but for the benefit of the incorrigible China critic, we present here a summary of short cuts which can be relied upon to produce the sort of implausibly low estimates of Chinese output which at times he seems to seek. (1) Find a high base year. This can be done by excluding the experience of the first 3-4 years on the ground of 'postwar reconstruction' (even though it in general involved completely new construction or reconstruction from scratch, and not simply repairing and recommissioning existing productive potential), and by arguing that as statistical resources were relatively scarce and so statistical coverage was substantially incomplete, the official estimates require upward revision. (2) Make more or less arbitrary downward adjustments to Chinese official physical output figures. This is often done on the basis of value judgments (e.g. prefaced by the comment that the official figure is 'implausibly high') or without any explanation whatsoever (e.g. Clark (1976) on agricultural output). (3) Where indices or value data have to be constructed, use weights which give a disproportionately high share to slow growing items, and use prices which give a disproportionately low value to fast growing ones (thus, for instance, ensuring that industry has a dispro-

TABLE 1.4: CHINESE AGRICULTURE IN INTERNATIONAL PERSPECTIVE

	Total Production				Per Capita Production			
	Index			Growth 1952-73	Index			Growth 1952-73
	1952	1962	1973		1952	1962	1973	
Market LDCs	100	136.4	178.7	2.8	100	107.2	108.3	0.4
Africa	100	124.6	152.0	2.0	100	—	—	—
Asia	100	136.4	180.1	2.8	100	108.3	111.6	0.5
Latin America	100	137.8	183.3	2.9	100	104.1	104.1	0.2
West Asia	100	140.5	184.1	2.9	100	108.3	107.2	0.3
China (Foodgrains only) 1949/52-1970/75				3.1				1.3

Sources: FAO Production Yearbook 1974, Table 1.2.

portionately low share as compared with other sectors). (4) Where data need to be converted into an international comparable form, use a conversion procedure which works so as to reduce Chinese comparative international performance.

There is no need to list in detail the practitioners who have used one or more of the above techniques. Criticism of them, however, should not be interpreted as uncritical support for any data 'official' issued by the Chinese; rather it is to say that given the wide acceptance of the reliability of a good deal of Chinese data, critics must now take up the burden of proving its inaccuracy.

## II

### Social Welfare and the Standard of Living

Respectable growth rates for selected macroeconomic variables during the last two or three decades are by no means peculiar to China. Rather the Chinese achievement is supposed to have lain in the combination of attaining increased productive performance to an extent which substantially raises per capita income on a statistical basis and of ensuring that this potential was transformed into rising consumption levels for the entire population, so simultaneously increasing mass living standards and stimulating further output growth. But to what extent does the empirical evidence support this rising mass living standards interpretation of Chinese socio-economic performance? And to what extent has inequality been reduced? These are the central issues to which we now turn.

No official Chinese data on household consumption, family budgets, or

income distribution in general are available. On the other hand, macroeconomic information about the production of agricultural and industrial consumer goods and about health, education and welfare expenditure, etc, is supplemented by a wealth of microeconomic data obtained by visitors to China about incomes, consumption and goods and chattels. Most of the evidence relevant for the question of rising living standards was presented in section 1, where it was shown that per capita consumption in national accounting terms rose by at least 3 per cent per annum during the period 1950-74, and that between 1950 and 1973, the indices of production and industrial consumer goods production rose by annual compound growth rates of 3.1 per cent and 9.8 per cent respectively.<sup>48</sup>

Raising the mean was, however, only one aspect of the Chinese approach to raising living standards. Centrally important was the policy of separating consumption from income and providing a floor for it, i.e. a living standard below which no one is permitted to fall. This consumption floor has been achieved mainly by (a) universal provision of benefits such as health, education, etc, at zero or negligible cost, (b) subsidies to ensure decent subsistence, (c) cheap housing, and (d) rationing of necessary goods when distribution according to spending power would deprive poorer consumers (together with progressive pricing for part-luxuries).<sup>49</sup> Although the actual floor current in any area will be influenced by differences in economic circumstances, interprovincial or local governmental transfers would then be used to ensure that such output differentials are not translated into equally large consumption ones, and



TABLE 1.5: INDICES OF CHINESE INDUSTRIAL PRODUCTION

	USCJEC—Field					Official		
	Total	Producer Goods			Consumer Goods	Total	Producer Goods	Consumer Goods
		Total	Machinery	Other				
1949	20	14	8	15	28	18	10	25
1950	27	21	14	22	36	24	15	33
1951	38	30	24	31	48	34	22	44
1952	48	39	33	41	60	44	32	55
1953	61	51	50	51	73	57	44	69
1954	70	62	60	62	82	66	53	79
1955	73	66	62	67	81	70	60	
1956	88	84	90	83	94	90	84	95
1957	100	100	100	100	100	100	100	100
1958	145	166	175	164	117	167	203	133
1959	177	212	242	205	131	232		
1960	184	237	274	228	114			
1961	108	129	116	132	80			
1962	114	138	140	137	83			
1963	137	158	178	153	109			
1964	163	183	213	177	135	163		
1965	199	212	263	200	183	195	214	178
1966	231	250	326	232	205	235		
1967	202	207	273	192	195			
1968	222	228	292	213	214	203		
1969	265	289	455	249	233	267		
1970	313	345	573	292	271	328	377	283
1971	341	395	645	336	270	376		
1972	371	428	677	370	294	408	522	301
1973	416	478	754	414	332	449	574	331
1974	432			429	341	471	600	350
1975	484(475)†					528(518)†		
1949-75	12.3(12.2)					13.1(13.0)		
1950-74	12.0	—	—	—	9.4	13.3	15.4	9.8
1950-75	11.1(11.0)	—	—	—	—	11.9(11.8)	—	—
1952-75	8.9(8.8)	—	—	—	—	9.6(9.5)	—	—
1952-58/9	18.7	27.3	28.6	20.2	11.2	23.5	—	—
1958/9-66	4.9	3.7	6.0	3.2	6.7	-0.3	—	—
1964-70	10.9	10.6	16.5	8.3	11.6	11.7	—	—
1964-74	9.7	—	—	8.8	9.3	10.6	—	—
1964-75	10.0	—	—	—	—	10.8	—	—

† Estimated on the assumption of 12 per cent (10 per cent) growth.

Source: Field (1975).

that the 'floor' in poorer areas reaches the required standard. [Here the conclusions of Lardy's work (showing that interprovincial transfers of social expenditures together with regional investment policy have prevented inter-regional differentials from increasing) are very important.<sup>50</sup> Although no automatic progressive tax-cum-subsidy system for communes exists, state loans and inter-brigade/inter-team transfers would be used to pull up consumption-deficient units.]<sup>51</sup>

Quite apart from these policies to effect a consumption floor, consumption differentials in China are also narrowed because of the way society is organised. For instance, units such as factories and neighbourhood committees allocate housing at their disposal on the basis of family size, not income; easy access to 'social' consumer durables and services through factory, neighbourhood and production team

organisations often render private ownership unnecessary, and steady creation of a socialist and co-operative ideological environment mean that the sort of pressures in the West which stimulate private ownership of durables are much weakened.

All these factors which moderate consumption differentials are supplemented by policies to make sure that goods of the kind which people wish to buy are in the shops when they wish to buy them. This has been achieved by the development of an efficient system of pricing and marketing. Widespread availability of goods has been assured by the creation of an extensive wholesaling network. Queues have been avoided by the efficient use of the price mechanism to balance demand and supply — a technique which in socialist countries is feasible only when income differentials are narrow and believed to have social legitimacy.

And quality is ensured by formal and informal methods of 'market research' by both consumer goods' factories and retail shops.

As explained above, income differentials exceed consumption differentials and, as the Chinese themselves recognise, are often far from negligible in magnitude, although by international standards they are remarkably low. When reviewing the evidence on this subject it is essential to emphasise that most of the data give only the high/low extremes, and not the distribution between them.<sup>52</sup> This has led some authors implicitly to exaggerate the degree of inequality by incomplete interpretation of the data. For instance, Chen's data (1969) on per capita income in 18 teams of a production brigade can be used to show that the figure for the richest team was 53 per cent higher than that for the poorest. But if all teams are given the same weight, the data show that the top four (22.2 per cent) have 26.6 per cent of total income, while the bottom four have 19.1 per cent. It is therefore extremely important to pay careful attention to such interpretation problems when examining the available evidence which, briefly, gives the following picture.<sup>53</sup>

*Intra-urban income differentials:* State industrial employees are paid according to one of two national wage scales (for workers and for technicians), on which the employee's location is determined primarily by age, and then by skill. In most state enterprises, the maximum wage differential would be of the order of one to four, though one to five or six or even seven might be attained.<sup>54</sup> Workers in heavy industry tend to be on somewhat higher grades on the scales than those in light industry and/or urban collectives.

*Intra-rural income differentials:* Recent data based on a variety of communes are not available. In a 1965 study, Burki (1970) provides information about the average income per family in a sample of communes: in the richest commune visited, this was around three and a half times that in the poorest visited (depending on which income measure was used).<sup>55</sup> Comparison between such commune averages of course obscures intra-commune differentials: the average individual income per team might vary within the range 1:2 between teams within a commune, and the average



TABLE 1.6: INDEX OF INDUSTRIAL PRODUCTION

	China			India					
	Field 1975 Weights	India Sectorally Grouped Weights 1960	India 1956 Weights	China 1949-57 Weights		India 1956 Weights		India 1960 Weights	Field 1975 Weights
				Field 1967	Field 1975	1956 = 100	1960 = 100		
1951	38	37	—	68	71	74	57	56	
1956	88	88	93	100	100	100	77	76	
1957	100	100	100			104	80	80	
1960						130	100	100	100
1970	313	317	240	265	261	224	172	181	
1973	416	423						201	196

income per individual may vary within the range 1:3 in any one team [see further evidence reviewed in Whyte (1975), pp 687-9]. But as already emphasised, such figures need careful interpretation within the Chinese context. Take, for instance, the question of interpersonal differentials within a team: firstly, these are largely to be explained by differences in the type of work performed (the more unpleasant jobs tending to receive higher pay), the amount of work done (women with young children, old people, etc, might not work full-time), and productivity per day worked (because in China employment is not determined by any type of marginal productivity wage test) low productivity workers — say on account of age or infirmity (and so associated low incomes are naturally observed); secondly, factors such as the extended family, and its pooling of income, facilities for very poor families to 'overconsume', provision of social consumption goods, etc, mean that personal income differentials cannot be translated simply or directly into inequalities in living standards.

*Urban-rural income differentials:* As average family income in a very rich suburban commune would probably be close to that in the city itself, the maximum differential between average family income in urban and rural areas should not be much greater than that in rural areas only.<sup>56</sup> On the average, the available evidence for the later 1950s and the early-mid-1960s seems to suggest that villagers' earnings are around half of those of urban industrial workers, though there are significant regional variations [see, e.g, Burki (1970), Howe (1973)].

To proceed from this cross-section type of information about the range of income differentials to tentative conclusions about changes over time in in-

come distribution, the following factors must also be taken into consideration:

- (1) Government policy to concentrate state sector wage increases on the lower grades has tended to limit, if not reduce, the range of wages paid and, more importantly, reduce distributional inequalities within it.
- (2) Within communes, a similar sort of process has been at work, though at a pace determined by local conditions and feelings: in more advanced areas, need as opposed to productivity accounts for an increasing proportion of income paid out or, to put it a different way, the privatised share of income earned is reduced; also in such more advanced areas, the production brigade rather than the team may become the unit of account, so that the value of the workpoint is the same over a much larger area. *Between* communes, the picture is more complicated since the policy of self-reliance together with the lack of progressivity in the agricultural tax creates conditions where differentials could widen easily. The government has tackled this problem through the planning process, giving priority in the allocation of loans to poorer communes, channelling new state industry to poorer regions so as to create (*via* linkages) opportunities for diversification into more productive economic activities, and probably (though the extent of this is not known) using the ultimate control it can exert through the planning system to ensure balanced location of commune industry.<sup>57</sup>

- (3) Similarly, as urban-rural productivity differentials have tended to increase, the government has had

to pursue redistributive policies to prevent rising differentials, with the main policy instruments being the location of new state industry and manipulation of the terms of trade. The outcome is that rural-urban differentials appear to have narrowed slowly in recent years.<sup>58</sup>

The tentative conclusions from all this are that income differentials — although still substantial — are slowly being reduced or at least contained, that inequality is not as great as some (e.g, Clark and Kahn) imply, and that the currently fashionable hypothesis of increasing inter-commune polarisation is not proven and quite possibly false. The Chinese have tackled the problem of inequality firstly by their macroeconomic policies to ensure that sufficient state funds are channelled to poorer areas that inter-regional differentials do not increase,<sup>59</sup> as normally happens in a rapidly growing economy, and secondly by progressively weakening the link between money income and standard of living, and seeing that the latter rises steadily, particularly for the poorer sections of the population.

### III

#### Maoist Political Economy

##### 3.1 THE "TWO LINES"

The policies of which the overall macroeconomic record described above is the outcome have changed considerably over time as the 'struggle between two lines' has taken on different forms.<sup>60</sup> The well known 'two lines' are about the achievement of socialist development in China. Although the debate between them is carried on largely over questions of economic management, it is on the subject of class struggle in China that they differ fundamentally. One view, formerly known as the Liu Shao-chi line, now more



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usually labelled as 'the capitalist road' or even the Teng Hsiao-ping line, presumes that class struggle in China has virtually died out, and emphasises such things as (a) growth rates and other strictly economic targets, (b) planning based firmly on financial targets and material incentives, (c) control by 'experts' rather than through mass participation, (d) pay differentials to encourage skill acquisition, etc.

The Maoist approach on the other hand is located firmly and explicitly in the realm of political economy.

The central issues concern class relationships and how these affect transition to socialism: this is because under socialism, the basic contradictions are still those between the relations of production and the forces of production and between the superstructure and the economic base, and *these find their concentrated expression in the contradiction (and struggle) between the bourgeoisie and the proletariat*.<sup>61</sup> Productive forces and relations must develop in step in order to preserve and strengthen the worker-peasant alli-

ance and to prevent any re-emergence and growth of the bourgeoisie which would jeopardise the whole process of socialist development in China. As Gittings (1975) paraphrased it, "Electricity is important, but 'politics in command' is equally so". This balance between the productive forces and productive relations is the linchpin of the Maoist approach to development and it is from this that the other — including those at times thought of as exclusively 'economic' — aspects of Maoist strategy derive. Participatory

TABLE 1.7: SELECTED INDICATORS OF CHINESE MACROECONOMIC PERFORMANCE — CHINA 1949-75

	1949	1950	1952	1957	1964	1970	1974	1975	Compound Growth Rates	
									1950-74	1952-74
<b>GNP (b \$ US 1973)</b>										
1 USCJEC	39.89	48.60	66.95	93.91	117.01	178.86	223.34	236.20†	6.4	5.5
2 USCJEC Adjusted	39.28	47.52	65.70	93.91	117.09	183.44	241.04	262.14†	6.7	5.8
<b>Population (m.)</b>										
A USSR (Konovalov)	549*	558*	581*	648*	730*	770*	790*	795*†	1.4	1.4
B UN Adjusted	529	540	562	622	706	776	817	826	1.7	1.8
C Orleans	530	547	570	632	730	794	844	857	1.9	1.9
D AIRD	538	547	570	641	747	837	920	942	2.1	2.1
<b>Per Capita GNP (\$ US 1973)</b>										
1 A	72.66*	87.10*	115.23*	144.92*	160.29*	232.29*	282.71*	297.11*†	4.9	4.1
B	75.41	90.00	119.13	150.98	165.74	230.49	273.37	286.00†	4.6	3.8
C	74.17	88.78	117.48	148.59	163.19	225.26	264.62	275.60†	4.6	3.7
D	74.17	88.78	117.48	146.53	160.12	213.77	242.73	250.74†	4.3	3.3
2 A	71.55*	85.16*	113.08*	144.92*	160.40*	238.24*	305.11*	329.74*†	5.3	4.5
B	74.25	88.00	116.90	150.98	165.85	236.39	295.03	317.36†	5.0	4.3
C	73.02	86.81	115.28	148.59	163.31	231.03	285.59	305.88†	5.0	4.1
D	73.02	86.81	115.28	146.53	160.22	219.24	262.00	278.28†	4.6	3.8
<b>Per Capita Consumption (\$ US 1973)**</b>										
2 A			92.7	114.6	—	170.3	219.6†	227.5†	—	3.8
2 B			95.9	119.4	—	169.5	206.5†	219.0†	—	3.5
1 B			97.3	119.4	—	165.2	191.4†	197.3†	—	3.1
1 D			96.3	115.8	—	152.9	169.9†	173.1†	—	2.6
<b>Foodgrains</b>										
Total USCJEC	108	125	154	185	195	240	259	268	3.0	
(mat) CO	108	125	154	185	200	240	275	284	3.3	
PC (Husked)										
Kg USCJEC A	157	179	213	228	214	249	262	269†	1.6	
B	163	185	221	238	221	247	253	259†	1.3	
C	161	183	218	234	218	242	245	250†	1.2	
D	161	183	218	231	213	229	225	227†	0.9	
<b>Industrial Production Indices (1957=100)</b>										
Total USCJEC	20	27	48	100	163	313	432	484†	12.0	
CO	18	24	44	100	163	328	471	528†	12.3	
<b>Producer goods</b>										
USCJEC	14	21	39	100	183	345	478(1973)		na	
CO	10	15	32	100	na	377	600		15.4	
<b>Consumer goods</b>										
USCJEC	28	36	60	100	135	271	341		9.4	
CO	25	33	55	100	na	283	350		9.8	

Note: Full details, explanations and sources are given in text above, Tables 1.2, 1.5, A1, and text accompanying them.

CO=Chinese Official

\* Population figure includes Taiwan.

† Estimated

\*\* 1957 prices used to evaluate share of GDCF in GDP (from Perkins, 1975a).



economic management on a decentralised basis, rising living standards for all with declining differentials, and steady progress towards the elimination of material incentives are amongst the economic hallmarks of the approach.<sup>62</sup> Indeed there now exists a vast literature about the strategy as a whole, with remarkable consensus about its underlying economic principles, the key elements of which may be characterised as:

- (1) Distribution is inseparable from growth because it affects the whole nature of the growth process, and so the extent to which income distribution itself can ever be transformed.
- (2) Greater 'self-reliance' (within reason) should be one of the principles which guides economic policy at every level of the economy.<sup>63</sup>
- (3) Planning should mainly be decentralised and should, over time, be based progressively more on ideological or *collective* material incentives rather than — as in Eastern Europe — mainly individual and competitive material incentives.
- (4) Economic growth should be 'balanced', which has the following corollaries:
  - (a) There should be a broad sectoral 'balance' between heavy industry, light industry and agriculture, with agriculture as the 'foundation' and industry as a whole as the 'leading sector'. Within agriculture, the policy was to be 'take grain as the key link and ensure all round development' the latter involving diversification of production and expansion of industrial crops according to local conditions.
  - (b) Development should be 'balanced' between regions and between town and countryside.
  - (c) Both modern and traditional technologies should be utilised.
- (5) Policies should be introduced to attack the 'Three Great Differences' — agriculture-industry, rural-urban and manual-mental. The latter entails explicit measures to break down the division of labour between mental and manual activities. (Given actual Chinese practice, and the discussions during the anti-Confucius campaign,

to these should perhaps be added a fourth — male-female.)

The chief focus of this and the following sections of this paper is on (4). Their aim is to link up what have previously been two largely separate branches of the China literature — the principles of its political economy and the empirical evidence about its economic progress: to examine not just the economic rationale underlying the 'balanced development' aspect of the Maoist strategy, but also the policies which were introduced to implement it and the quantitative changes in output (to some extent touched on earlier), employment, regional development, incomes and consumption to which it has led; in other words, to establish and appraise how it operated *in practice* between sectors, technologies and regions.

### 3.2 MAOIST CONCEPT OF BALANCED DEVELOPMENT: THE MEANS TO INDUSTRIALISATION WITH RISING MASS CONSUMPTION<sup>64</sup>

The celebrated 'Ten Great Relationships' (TGR) speech of 1956 is still the best starting point for any analysis of the Maoist concept of balanced development. Its central theme is how socialist development in China would require balance in each of ten potentially contradictory political, economic or social relationships. For the purpose of this paper, these various aspects of balance are examined primarily from an economist's perspective, although, as emphasised above, their political aspects are ultimately paramount.

#### 3.2.1 Intersectoral balance

Both in the TGR and Wan-sui analyses, it is primarily a three-sector economy which is under consideration: agriculture, light industry and heavy industry.<sup>65</sup> The main economic policy aim is made clear from the outset: '... heavy industry is the key sector which must be given priority' (TGR, p 62). This is, however, not to be attained by squeezing light industry and agriculture, but by developing them in a complementary fashion:

"Our method is, on condition that priority is given to the development of heavy industry, to enforce the simultaneous development of industry and agriculture and at the same time several simultaneous development." (Wan-sui, p 277).

Two main economic arguments for

this strategy are advanced. Firstly, light industry and agriculture generate surpluses more quickly than heavy industry, and so can provide the capital accumulation required for investment in heavy industry:

"The development of heavy industry requires capital accumulation. Where will this accumulation come from? It can come from heavy industry itself. It can also come from light industry and agriculture. But light industry and agriculture can provide the greater and faster accumulation". (TGR, p 63.)

Furthermore, with light industry as a source of surplus, surplus extraction from agriculture to finance a given expansion in heavy industry would not need to be so severe. Two points need to be made here. Firstly by 'surplus', Mao means surplus of food and raw materials which can be exchanged for industrial consumer goods, etc. Secondly, Mao's argument holds strictly only in a world without scarce resources. In fact (see section IV) this policy was implemented by a combination of resource reallocation towards agricultural producer goods and of bringing new resources into use. Therefore some shift away from heavy industrial consumer goods (as compared with what a heavy industry first strategy involved) was required.

The second economic argument advanced for balanced development between sectors is that this strategy for the development of heavy industry permits rising mass living standards to be attained simultaneously, in contrast to the Soviet approach which in the circumstances of the 1920s had inevitably involved restraining mass consumption,<sup>66</sup> (but see further below).

"The result ... of one-sidedly developing heavy industry without paying attention to the people's livelihood, will be to make people dissatisfied so that even heavy industry cannot be run well ... The second method, i.e., developing heavy industry on a foundation of satisfying the needs of the people's livelihood, will provide a more solid foundation for the development of heavy industry, and the result will be to develop it more and better." (TGR, pp 64-5)

Again, in Wan-sui (p 277):

"If we want heavy industry to develop rapidly, we must make everybody happy and enthusiastic in his work. And if we want this to happen, we must promote industry and agriculture, and light and heavy industries simultaneously. As long as we make agriculture, light industry and heavy industry forge ahead simultaneously and rapidly, we will be able to guarantee the adequate



improvement of the livelihood of the people simultaneously with the rapid development of heavy industry."

As Mao emphasises, this approach contrasts sharply with the Soviet industrialisation strategy of the 1920s: though for primarily political reasons explained below it would be seriously misleading to use the current Chinese strategy's apparent advantages over the Soviet approach to criticise the policies actually implemented in 1920s' Russia. However, at first sight, the Chinese approach of industrialisation with rising mass consumption might seem akin to that advocated by Bukharin during the industrialisation debate. Bukharin emphasised the importance of developing agriculture along with industry rather than concentrating resources on heavy industrialisation. In "Building Socialism", he argued that certain essential proportions should be maintained in the growth of industry and agriculture: the peasantry should be able to purchase consumer goods at sufficiently favourable relative prices to induce them to supply the marked surplus required for sustained industrialisation. The political framework of reference was, however, rather different. Bukharin and the other members of the Right Opposition had in mind as a transitional phase an agricultural sector based on individual peasant producers,<sup>67</sup> while Mao, from the time that the policy of simultaneous industrial and agricultural development was first mooted, always had in mind a collectivised agricultural sector.

Two further arguments in favour of Maoist balanced development, implicit in *Wan-sui*, have been brought out more explicitly elsewhere. The first — and obvious — is that agriculture provides many of the inputs for industrialisation:

"To this day, most of the raw materials (about 70 per cent in 1975), manpower and funds we need for expanding production in light industry come from agriculture, and much of those for expanding production in heavy industry come from the same source." (*Red Flag* journal article reported in *News from Hsinhua News Agency*, Weekly Issue 321, Thursday, April 3, 1975, parentheses added, based on figure given in *NHNA Special Issue*, October 10, 1975, p 22.)<sup>68</sup>

The second argument is that agriculture enlarges the market for industrial goods:

"Agriculture provides a market for both heavy and light industry. Chairman Mao pointed out in 1957: '... it is not yet so clearly understood that agriculture provides heavy industry with an important market. This fact, however, will more readily appreciated as gradual progress in the technical improvement and modernisation of agriculture calls for more and more machinery, fertiliser, water conservancy and electric power projects and transport facilities for farms, as well as fuel and building materials for rural consumers.' China's rural areas constitute a most extensive market and offer a rare advantage to industrial development." (*Ibid*)<sup>69</sup>

Here the emphasis is on the agricultural sector as a market for industrial producer goods, but it is of course also regarded as a market for industrial consumer goods. On the face of it, this might seem a curious argument in a socialist economy. It must, however, be interpreted in the context of the 'rising mass consumption' argument discussed above: steady improvement in the standard of living of the peasantry is necessary if they are to work wholeheartedly towards increased agricultural production, which in turn would aid industrial production both directly (from the supply side) and *via* the consequent increase in rural incomes. However, it should be noted that agricultural and light industrial expansion is by no means the only way in which an expanding market for industrial goods can be created. For instance, a strategy based on much greater heavy industrial priority would create a 'market' as the heavy industrial sector would use its own output as input in the next period. The Maoist 'market' argument derives not from supply and demand considerations, but rather as a by-product of the choice of a rising living standards' strategy described above.

The Maoist principle of 'taking agriculture as the foundation and industry as the leading factor' was not meant to imply abandonment of the policy goal of rapid industrialisation, but rather a new way of trying to achieve it;

"Arranging the national economy in the order of priorities of agriculture, light industry, heavy industry does not mean agriculture and light industry receiving the largest shares in the allocation of funds and materials. It means meeting the needs of agriculture and light industry first and foremost, and arranging for heavy industry on the

basis of the state of agriculture and light industry. In actual effect, heavy industry will still receive a larger share of funds and materials than agriculture and light industry, for it is the manufacturer of items of production and the supplier of equipment for agriculture and light industry... it is an objective law that priority is given to the development of the department producing the means of production. Taking industry as the leading factor means primarily taking heavy industry as the leading factor." (*Red Flag* journal article in *News from Hsinhua News Agency*, Weekly Issue 321, Thursday, April 3, 1975.)

Again, however, this point has to be scrutinised carefully. In a world of scarce resources, allocating more to one sector does involve less for another. But as is explained below, in the implementation of the balanced development policy, the Chinese were as much if not more concerned with utilising previously unused or wasted resources than with reallocating existing ones in a different way. Indeed, mobilisation of new resources was the other side of the coin to the decision to ensure that rising living standards accompanied industrialisation.

### 3.2.2 Technological balance

Intersectoral balance in development is, however, only part of the wider strategy which has become known as 'Walking on Two Legs', i.e:

"the simultaneous development of industry and agriculture and that of heavy and light industry, with priority given to ... heavy industry: the simultaneous development of (modern) industries; and the simultaneous application of foreign and indigenous methods for production ... with overall planning and the proper division of labour and co-ordination." [Peking radio broadcast, reported in *NHNA* release, and quoted in Hoffman (1974), Ch 1.]

In other words, there should be a balanced spectrum of techniques of production as well as of economic activities. Such planned technological dualism at this stage of China's development would, it is argued, attain three goals: (i) a high rate of industrialisation, (ii) creation of high technology industries close behind or on a par with those of the West, and (iii) full utilisation of manpower resources. Selective use of advanced foreign techniques was essential if China was to build a strong industrial base and 'catch up' with the West:

"In the past, backward capitalist countries, relying on the application



of new technology, caught up in production with advanced capitalist countries. The Soviet Union also relied on the application of advanced technology in catching up with capitalist countries. To be sure, we also will, and can, do the same." (Wan-sui, p 288)

"China imports some new equipment and technology that are needed in carrying out the policy of being more self-reliant and speeding up the building of socialism." [Statement by the head of the Chinese Council for the Promotion of International Trade; (Chen (1975b) p 511).]

Indigenous labour-intensive techniques (or newly developed labour intensive methods in 'modern' industries such as fertiliser, cement, etc), were to be encouraged as much because of their contribution to output as because of their contribution to employment.

"The question does not rest with old-type technology, a large population, or with increasing employment. We are developing a large number of medium and small-sized enterprises under the guide of big enterprises and adopting extensively indigenous methods under the guide of foreign methods mainly for the sake of achieving a high rate of industrialisation." (Wan-sui, p 261.)

Mao recognises that ultimately this technological dualism would have to disappear, but that in the existing state of the Chinese economy, it was necessary for the rational development of the country's resources. Thus in relation to agriculture, rural mechanisation to raise agricultural productivity (and to strengthen the worker-peasant alliance)<sup>70</sup> was the ultimate goal, but given China's level of development, this could not and, Mao argued, should not be attempted prematurely:

"If we are to achieve overall mechanisation... it still won't do in the second decade. Perhaps it will do in the middle of the third decade. In the coming period, due to shortage of machinery, we will still be advocating semi-mechanisation and reform of tools. At present, we are still not advocating universal automation. We should discuss mechanisation, but we should not do it excessively. Excessive discussion of mechanisation and automation will make people have contempt for semi-mechanisation and production by native methods. There have been such tendencies in the past." (Wan-sui, pp 287-8.)

The commune provided the main institutional form whereby labour-intensive techniques could be implemented in a positive way. As all shared in output, methods could be applied where labour utilisation greatly exceeded the

point where marginal returns would meet a wage test. In this special sense only has the institution of the commune encouraged intensive application of labour in much the same way as family cultivation in the non-socialist economies of South Asia. In general, however, the comparison is misleading, since institutional factors in the latter countries have always precluded all the other forms of intensive labour mobilisation and utilisation that become possible in collectivised agriculture.

### 3.2.3 Interregional balance

In many respects, Mao's analysis of inter-regional balance is similar to that of intersectoral balance. In order to develop industry in poorer regions (and forestall emergence of a dual economy), it would be necessary not only to invest in the former, but also to continue investing in richer regions which could produce larger surpluses, of which part could be used for further development in less advanced areas.

"In future the greater part of heavy industry — ninety per cent or perhaps still more — should be set up in the interior so that industry may become evenly distributed and rationally sited over the whole country... (But) our old industrial base is mainly in the coastal regions. If we do not pay attention to industry in the coastal regions this will be to our detriment. On the other hand, if we make full use of the capacity both in plant and technology of coastal industry and develop it properly, then we shall have all the more strength to develop and maintain industry in the interior." (TGR, p 66)

Deeply associated with this is the policy of regional self-sufficiency:

"We will not say that there is no need for each province to produce goods which it can depend on other provinces to supply to meet its needs. We want all provinces to do as much as possible in developing all kinds of production, so long as they do not militate against the overall situation." (Wan-sui, p 296.)

In other words, the fact that a commodity could be easily imported from another region was no reason for not initiating or expanding local production — a fair degree of regional self-sufficiency was desirable on economic grounds (e.g. to stimulate resource mobilisation), not just on those of national defence. Certain critics of China have argued that such provincial self-reliance must substantially reduce internal trade, gains through specialisation, and so eco-

nomie growth. Firstly, however, they ignore the fact that high transport costs in such a large country often make local 'import substitution' profitable and growth inducing. But in any case, the critics' logic is faulty: in an expanding economy, increases in own-produced goods are perfectly compatible with increases in the volume of internal trade, and this appears to be what has happened in practice in China. As regards specialisation, it is important to take into account the fact that since the population of a Chinese province probably exceeds that of an average European country, provincial self-reliance is perfectly consistent with the achievement of substantial gains from specialisation. Similarly, it does not follow that increased regional self-sufficiency under decentralised socialist planning necessarily prevents the attainment of greater regional balance in per capita output and incomes, and of smaller interregional differentials. The outcome depends, as shown in section IV below, on the precise form of decentralisation.

### 3.2.4 Maoist concept of 'balance' and its fundamental political application

Two further points must be made before the empirical aspects of the balanced development strategy can be tackled. Firstly, the Maoist usage of the word 'balance' differs from that common in the West; it is a fundamentally *dynamic* concept, not a static relationship between certain variables. 'Imbalance' is the normal state of affairs which persists while any particular aspect of 'balance' is sought. But just as the latter is almost attained, new imbalances will have been created; there is therefore a perpetual adjustment cycle of imbalance-balance-imbalance during which balance will only be transitional (See Wan-sui, p 280).

Secondly, it is essential to bring out the fundamentally political character of the 'balanced development' approach. Development necessarily involved, *inter alia*, the construction of producer goods industries. How was this to be done? Not, given the American embargo, from producer goods imports (even had this been deemed desirable). Rather the choice was between repeating the Soviet 'heavy industry first' approach or striking out in new directions. The key point here is that the Chinese communists had a choice because of the very different political on-



environment in which they found themselves after gaining power (as compared with the bolsheviks in 1917). The bolsheviks had almost completely lacked any rural cadres, or indeed any rural power base. They had come to power promising to end the war and to give land to a peasantry with whom they had had little contact, and whose conservation was accentuated both by the receipt of land and by the absence of any exposure to socialist ideology. The bolsheviks lacked both the knowledge and cadre force to introduce gradual co-operativisation, so that, faced firstly with a dwindling grain surplus, and secondly with strong passive resistance from the peasantry, by the late 1920s the regime was on the point of collapse. Thus the more disastrous features of collectivisation were a concomitant not of the Soviet 'heavy industry first' strategy, but rather of the bolsheviks' political isolation from the peasantry. In contrast, the Chinese communists *did* have the rural base which the bolsheviks lacked; indeed they had a crucial mass base among the middle as well as the poor peasantry. This meant not only that they had greater flexibility in policies *vis-à-vis* the agricultural sector, but also that they were more aware of and responsive to the peasantry. Soviet-style heavy industrialisation with collectivisation but without the Soviet concomitants thereof *was* a feasible policy in China — up to a point. But it had deficiencies: Lippitt (1975) argues convincingly that the slow agricultural growth which, after the mid-1950s, the emphasis on heavy industry brought about, seriously held back China's economic development; in addition, it appeared that it could start to weaken the key alliance between peasantry and urban proletariat which successful transition to socialism entailed. The deliberate choice of a strategy to increase mass — and mass rural — living standards was much less inspired by considerations of egalitarianism than by questions of politics and power. For if the worker-peasant alliance got seriously out of line, not only would it set back progress towards socialism, but also — ultimately — prejudice any sustained economic growth.

To put all this a different way, Chinese concern with achieving the appropriate balance between development of productive relations and of pro-

ductive forces led them to select the 'balanced development' approach described above. However, because of their differing political circumstances, they, unlike the bolsheviks, *did* have a choice — and, in Chinese conditions, it appears to have been the right one. But it should be noted that recognition of the superiority of the Maoist approach for present day China does not entail *any* inference about the policies pursued by the bolsheviks in the Soviet Union of the 1920s. Self-indulgent critiques of the latter by self-styled Maoists advance neither Marxist theory nor history.

#### IV

### Implementation of Balanced Development

#### 4.1 INTRODUCTION

However attractive a policy of industrialisation with rising living standards might appear, the central questions are how can it be put into effect, and what has been its outcome in China. In this section, the available evidence on these issues is summarised in particular, the implications of the implementation of the strategy for the intersectoral allocation of investment resources, for technology, and for employment.

#### 4.2 INTERSECTORAL ALLOCATION OF INVESTMENT RESOURCES

After liberation, China introduced

the Soviet kind of Central planning and, along with it, priority to heavy industry in investment allocation. For agricultural development, the main policy instrument was to be institutional reform, not provision of modern inputs. This approach was continued until the major policy changes of the later 1950s. The quantitative extent of this priority to heavy industry in total (not just state) gross fixed investment during the First Five-Year Plan is shown in Table 4.1. Thus although gross fixed investment in agriculture began with a historically predominant share (as much as 51.1 per cent in 1952 if rural housing is included), the industrialisation drive rapidly raised the share of industrial investment, almost doubling that in heavy industry within 5 years. As much as 40-60 per cent (depending on the definitions used) of agricultural gross fixed investment was for replacement purposes only.<sup>71</sup>

The Great Leap Forward in 1958 was really a last attempt to keep up the rapid growth attained during the First Five-Year Plan period. *Inter alia*, by means of radical reorganisation of the socio-economic structure in rural areas, it aimed to overcome the bottlenecks which slow agricultural growth had created. However, its comparative short-term failure meant that there was no choice but for accelerated invest-

TABLE 4.1 SECTORAL COMPOSITION OF TOTAL GROSS FIXED INVESTMENT EXCLUDING HOUSING (per cent)

	Agriculture <sup>2</sup>	Industry		Other (construction, prospecting for natural resources, transport and communications, trade, education and research, public welfare, urban public utilities, government admin, etc)	Total (m yuan)
		Light Industry	Heavy Industry		
1952	31.8	5.3	16.7	46.2	6583
1957	23.5	5.6	30.9	40.0	18198

1 The following distinctions are made in the presentation of Chinese data on investment:

Accumulation	{	Basic construction investment	{	New fixed assets	{	Construction
		Increase in working capital minus depreciation		Ancillary expenditure		Installation Purchase of machinery

See further Chao (1974).

Readers should, however, bear in mind the difficulties encountered in estimating investment when a substantial part of it is 'home-made'. This applies particularly to rural water conservation, irrigation and river control, and to rural housing, but also to rural small industry.

2 For a full discussion of how these estimates were obtained and what they include, see further Chao (1974), ch 7, and Tables A 11-14.

Source: K Chao 1974, Tables 31 and 32.



ment in the agricultural sector. During 1958 and 1959, agriculture's share in gross fixed investment remained roughly the same as during 1957 (Chao, 1974), but in 1960, a start was made on the implementation of the new strategy for simultaneous development of agriculture and industry — as Mao points out in *Wan-sui*.<sup>73</sup> He goes on to give examples of what it was intended to mean in terms of resource allocation:

"The importance we attach to agriculture is being symbolised by the quantity of steel products which we are allocating to agriculture. In 1959, steel products allocated to agriculture were only 590,000 tons. This year, including allocations for water conservancy construction, they amounted to 1.3 million tons. This should be considered as truly simultaneous development of industry and agriculture ... For example, this year we estimate we can produce about 14 million tons of steel. We will use ten per cent of this steel to carry out technical transformation in agriculture and water conservancy construction. The remaining 90 per cent in the main will still be used for construction in heavy industry and in communications and transportation. Under the conditions of this year, this is simultaneous development of agriculture and industry." (*Wan sui*, p 292; the year referred to was probably 1961-62.)

Before examining in detail from the interrelated physical and financial viewpoints the policies to increase emphasis on agriculture, their essence can be summarised briefly as follows: on the physical side, (1) agriculture's share in the increment to new state

investment was adjusted, and (2) rural resources were mobilised to establish agriculture-linked small industry on a self-reliant decentralised basis in the collective sector; on the financial side, (1) taxation and pricing policies were combined so as to improve resource provision for and living standards in the agricultural sector, and (2) mobilisation of the rural surplus available for investment was decentralised.

The new emphasis on agriculture and on its *technical* not just *social* transformation was formally adopted at the 10th Plenary Session of the 8th Central Committee in 1962. As Mao has stressed, the new policy essentially required an increase in the level of mechanisation and greater use of modern inputs.<sup>73</sup> It also required much greater availability of organisational resources for and political attention to the agricultural sector than ever before. Table 4.2 shows the increase in modern inputs to agricultural production from 1957 to 1974. Comparable series are not available for the subsequent 2 years, but all reports indicate that supplies have increased particularly rapidly since then.<sup>74</sup> As can be seen, the emphasis has been very much on raising working capital inputs, particularly during 1960-65. Over this period, agriculture's share in gross fixed investment rose only slightly — and this primarily because of the serious fall in non-agricultural investment

brought about during the post-Leap economic crisis.

The increases in fertiliser input were obtained mainly by stepping up domestic production of chemical fertilisers, partly by increasing imports and partly by further improving utilisation of organic material. Between 1964 and 1974, total chemical fertiliser output (of which that of nitrogenous fertilisers was about 60 per cent) rose more quickly (by a compound growth rate of 15.7 per cent pa) than that in any other branch of industry except petroleum (at 22.3 per cent pa) and tractors (at 20 per cent pa).<sup>75</sup> And in 1975, output was 2.5 times that of 1971.<sup>76</sup> This was achieved partly by expanding the number and capacity of larger scale state factories — indeed in 1973, China ordered 13 best practice urea-ammonia plants from abroad; primarily, however, it was done by establishing — at only a fraction of the fixed investment cost of large plant — small-scale rural fertiliser plants based on modern technology,<sup>77</sup> either under collective ownership or under state ownership and county leadership. These produce fertiliser with a somewhat lower nutrient weight.<sup>78</sup> In other words, the increase in agriculture's fertiliser input was achieved partly through a shift in state industrial resource allocation within heavy industry itself, and partly through the sort of small-scale rural industrialisation financed by local resources (see below) at the commune and county level, which in the extreme

TABLE 4.2: INDICES OF MODERN INPUTS TO AGRICULTURAL PRODUCTION, 1957-65

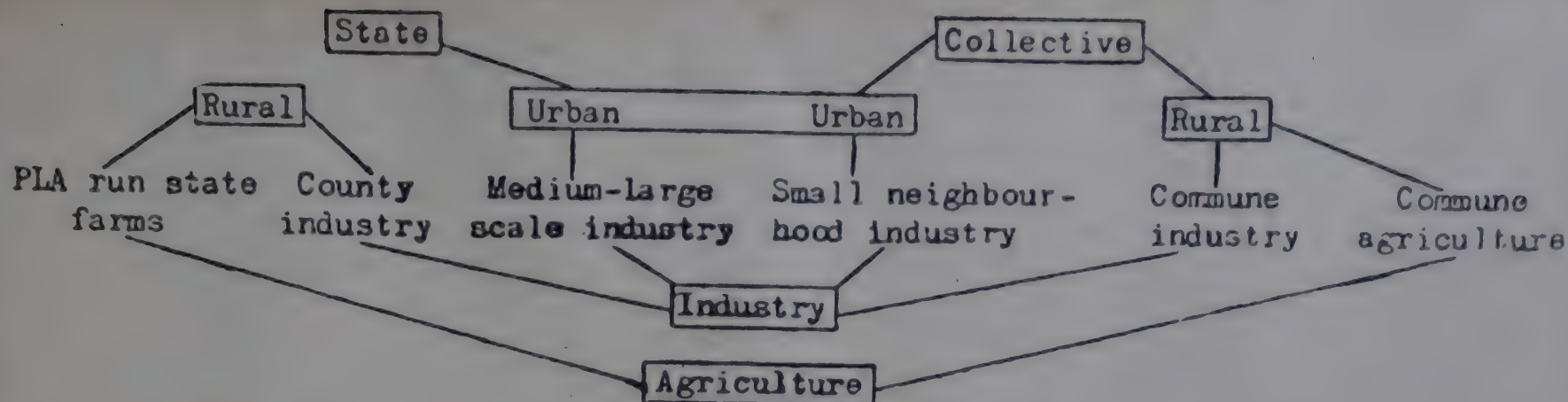
	Chemical Fertiliser				Farm Tractors (in standard sets)		Power Driven Irrigation and Drainage Equipment		Electric Power Consumption in Rural Areas
	Domestic Pro- duction	Per Cent from Small Plants	Im- ports	Total Supply	Domestic Production	Total Stock	Domestic Production	Total Existing Capacity	
1957	100		100	100		100	100	100	100
1960	293		85	127	2591*	321	1039	1054	926**
1962	345		92	194	1546*	420	246	714	1435
1964	793	30.0	139	401					
1965	1138	n a	246	604	2612*	530	646	1530	2963
1970	1609	60.0	569	986					
1971	1931	59.5	569	1115					
1972	2287	59.8	592	1272					
1973	2874	54.0	569	1493					
1974	*3448	45.0	439	1645	* 1958 = 100				**1961 figure

Note: Chao's series for fertiliser output between 1964 and 1974 differs from Perkins' because he works backwards from a 1974 figure of 30 m tons given by Teng Hsiao-ping, while Perkins works forward from a 1964 estimate — both accept Chou En-lai's report that 1974 production was 330 per cent over that of 1964.

Sources: (a) fertiliser: domestic production 1957-62, Chao 1974, T 33; dom prod 1964-74 and per cent from small plants, Chao 1975, T 1; imports, Perkins 1975b, T 5.  
(b) all other columns: Chao 1974, T 33.



DIAGRAM



has been called 'capital formation with bare hands' since it depended crucially on the increased labour participation and labour specialisation which collectivisation made possible. In a similar way, substantial increases were achieved in the domestic production of other 'modern' agricultural inputs — electricity, tractors, different forms of irrigation, pesticides and fungicides, transport equipment, etc.<sup>79</sup>

The increased application of these inputs really marked the beginning of China's Green Revolution. Their availability did not of course always increase steadily, varying naturally according to industrial fluctuations. Furthermore, they were not introduced everywhere, instead being to a certain extent concentrated initially as a "package" in about 11 'high and stable yield' regions,<sup>80</sup> (which in 1974 amounted to about 20 per cent of the area sown to foodgrains), though by no means always so.<sup>81</sup> Then in the later 1960s, HYV rice seeds (comparable to those from the Philippines) were developed indigenously, and by 1971, constituted about 20 per cent of the rice crop.<sup>82</sup> At the same time, HYV wheat seeds constituted over 10 per cent of the wheat crop. In addition, careful seed selection of the hardiest local varieties has been widely practised as an obvious method of seed improvement. By 1975, 80 per cent of the sown rice acreage and 70 per cent of the sown wheat acreage were under improved or HYV seeds, depending on suitability (the 'miracle' HYV strains developed abroad are not always well suited to Chinese conditions because of incompatibility between their longer growing season and Chinese multiple cropping practices).<sup>83</sup> Stavis (1976) provides more detailed data — as long ago as 1965, 9 per cent of the sown wheat acreage was under HYVs proper, while in 1973, the proportion

for sown rice acreage was 17 per cent. In the same paper, he surveys the overall spread by 1974 of modern grain production [defined as full use of modern inputs, including fertiliser, high-yielding varieties and water control (generally by low lift pumps)] as shown in Table 4.3.

That the Chinese are by no means satisfied with this rate of progress, however, is clear from the inauguration in late 1975 of the mass movement to build Tachai-type counties so as to accelerate the pace of agricultural modernisation (see *Peking Review*, Nos 44 and 46, November 1975).

The above discussion of the increases in real resources allocated to agriculture has its dual in several changes in the financial relationships between the agricultural sector and the rest of the economy. [At this point, it may be worth recapitulating the various overlaps between the state/collective, urban/rural and industry/agriculture distinctions (see Diagram). As will become clear in the subsequent discussion, most of the data on the financial (and real) interrelationships between subsectors are not exhaustive in their coverage — to take one example, a lot of discussion focuses on the relationship between agriculture and the state, not that between agriculture and industry or that between the collective sector and industry.]

In the early years after liberation, the redistribution of agricultural property income as a result of the land reform permitted the realisation of both a substantial net agricultural contribution to total domestic capital formation and increased incomes for the peasantry: because of the latter, it was feasible in the Chinese political environment for the state to extract a substantial share of the surplus by combining agricultural taxation and pricing policies in such a way that the terms of trade remained fairly unfavourable to agriculture (as compared with the situation during the 1930s), but favourable to state industrial enterprises.<sup>84</sup> However, although these policies raised the whole economy savings-investment ratio, because of the sluggish growth of agriculture, it became difficult to sustain it, let alone to increase it further. In fact, because agricultural growth lagged so much behind that of industry (see section I above), by the middle of the 1950s it appears that there could have been a net transfer of resources from industry into agriculture. Ishikawa (1967) found that, depending on whether or not the data on agricultural output (valued at *current* prices) were assumed to include the agricultural tax, the farm sector (defined as all cultivating households) had, respectively, an import excess from or an export excess to the rest of the economy in 1952,

TABLE 4.3 STAVIS' SUMMARY OF THE SPREAD OF MODERN GRAIN PRODUCTION, CHINA 1974

	Area Sown to Grain, Including Multiple Cropping (m ha)			Total Cultivated Area, Excluding Multiple Cropping (m ha)	
Modernising regions					
High and stable yield areas	11	43	(31%)	29	(24%)
Improved regions	32				
Traditional regions, some marginal change	95		(69%)	91	(76%)
Total	138		(100%)	120	(100%)

Source: Stavis (1976), p 83.



but that in either case it had become an import excess by 1956. When he went on to value all transactions at 1952 constant prices in order to examine the direction of the real resource transfer over time (as opposed to the magnitude of the transfer in financial terms in any given year), he found that there was an import excess in 1956 whatever assumption was made about the inclusion of the agricultural tax, thus indicating a shift of real resource flows towards agriculture. If, however, a pre-war year is selected for the price base, a (declining) export excess in real terms is obtained for both 1952 and 1956. Thus although data problems preclude any firm conclusion about the absolute magnitude of the intersectoral resource transfer in any particular year, the direction of the transfer during the first half of the 1950s is clear in relative terms from both the financial and real standpoints.

This situation was partly the result of the government policies of (i) not increasing agricultural taxation when production increased and (ii) adopting a pricing policy which meant that the agricultural terms of trade steadily improved (see further below). But, more significantly, it had also been brought about by agriculture's relatively slow growth during the 1950s — to an extent that made it an increasingly effective constraint on growth in the rest of the economy.<sup>85</sup> In certain respects, the new 'financial' policies adopted to deal with this were no more than a continuation of the old — thus the above-mentioned policies *vis-a-vis* taxation and the internal terms of trade were not modified. By January 1975, the annual agricultural tax had fallen to 5 per cent of the gross value of agricultural production (as compared with 12 per cent in 1953); also, compared with 1952, the price ratio between industrial and farm products had narrowed by 40.5 per cent since prices of farm and side-line products had virtually doubled, while those of modern inputs to agriculture had been reduced by one- to two-thirds<sup>86</sup> (see Table 4.4).

However, the operation of these policies has to be considered in the context of decentralised planning system introduced in 1957, since the combined outcome really amounted to the end of direct state control over the utilisation of subsequent increments to the agricultural surplus and so reduced state control over the total rural col-

TABLE 4.4: RURAL-URBAN TERMS OF TRADE

	Agricultural Purchase Price Index for Farm and Sideline Products*	Price Index of Industrial Products Sold in Rural Areas	(1)/(2)	Price Index of Producer Foods Sold in Rural Areas
	(1)	(2)	(3)	(4)
1952	100	100	100	100
1954	113.8	100.2	113.6	na
1957	122.4	101.6	124.5	na
1963	154.7	114.3	135.3	na
1971	156.2	114.0	137.0	na
1973	160+	na	na	50

\*Excluding premium for above-quota sales.

Source: Perkins (1975b), Table 7.

lective sector surplus.<sup>87</sup> The aim of this strategy was, by providing a collective material incentive at the grass-roots level, to achieve a higher agricultural output and marketed surplus than would otherwise have been the case, and to encourage a good part of such an additional surplus to be utilised for rural production of agricultural inputs on a small-scale basis. The important point is that to the extent that this policy succeeded, it attracted fewer resources away from investment in producer goods for industry than would otherwise have occurred. Furthermore, the total capital stock in use at any time was increased by campaigns to lengthen the life of and/or find new uses for old machinery, a policy which became feasible on a substantial scale as a result of the post-collectivisation rise in labour participation rates. In real terms, the net result of all these policies was the accelerated increase in modern inputs to agriculture reported above; in financial terms, the strategy entailed firstly that control was decentralised over most of what, given state pricing policies, was the almost guaranteed increase in the agricultural financial surplus<sup>88</sup> (so as to stimulate collectively owned and financial investment, particularly in agricultural inputs), and secondly, that resources flows between the agricultural sector and the state shifted in favour of the agricultural sector. But although this *relative* shift towards agriculture is clear, the outcome in *absolute* terms is not. The available evidence is summarised in Paine (1976a) p 286. However, no final verdict can be reached without provision of more information.

#### 4.3 REGIONAL BALANCE

Since space considerations mean that all the remaining aspects of balanced development cannot be covered here,

its regional aspects have been selected since these shed important light on the planning process through which the overall policy was administered and on income differentials relevant for the discussion in Section II above.

The central question raised has been whether or not inter-regional differentials have increased, particularly in view of the argument that self-reliance together with decentralised planning must have had egalitarian effects. According to this view, decentralisation meant that more developed provinces with high revenue remission rates to the state prior to decentralisation would be able to use these to finance their own development; correspondingly, state subsidies to poorer provinces would have to be reduced, with the overall result that resource allocation would shift substantially in favour of the richer provinces.<sup>89</sup>

To test this empirically, Lardy (1975) compared the situation before decentralisation in 1957 with that which resulted afterwards. Firstly, he examined changes in provincial health, educational and welfare services, and found that the level of social services provided in the less developed provinces did *not* decline compared to that in more developed regions — indeed, provinces which were more dependent on the central government prior to 1958 experienced larger increases in per capita social expenditure than did less dependent provinces. Secondly, he examined changes in provincial shares in national investment and found that 'more developed provinces were not able, on the average, to increase their investment shares ... Relatively backward provinces such as Kweichow and Fukien experienced the largest increases in their shares of national investment while several more developed provinces experienced sharp declines'. Indeed, the evidence suggested not that the central government had lost control over inter-provincial resource allocation, but rather



that it was still able to implement its own desired shifts in investment strategy.<sup>90</sup> This was so simply because the central government retained financial control over a key part of provincial revenues and expenditures, and ensured that there was no link between total provincial revenue and its total expenditure.<sup>91</sup> To put it differently, *extraction* of the state's part of the economic surplus was decentralised, but its subsequent utilisation still lay primarily under central control, after extensive consultation with decentralised levels — i.e., decentralisation of the state surplus entailed more the *democratisation* of state control over resources rather than the loss of it.

Lardy's data, however, relate only to the decade ending in 1960, and correspondingly detailed data are not available for subsequent years. However, some indication of changes in inter-regional inequality is given by examining provincial shares in the gross value of industrial output and in the per capita gross value of industrial output although these *substantially* overstate interprovince differentials in average living standards as they exclude the effects of state interprovince transfers of funds for social services, etc. Field, Lardy and Emerson's data (1975) show that the share of the five coastal provinces plus Peking, Shanghai and Tientsin, in the total national value of industrial output was 61.1 per cent in 1952 and 57.9 per cent in 1973, while the corresponding percentages for the five provinces which were most backward in 1957 were 8.1 per cent and 14.3 per cent (population in the coastal areas included amounted to about 30 per cent of the national total, while that in the most backward provinces amounted to about 20 per cent). In terms of per capita industrial output, the average for the three richest provinces in 1957 had by 1972 increased by 30 per cent as compared with 38 per cent for the three poorest. Thus in this crude sense, interprovincial differentials seem to have narrowed even before the important state interprovincial transfers of funds have been taken into account.<sup>92</sup>

Donnithorne (1976) disagrees with this overall evaluation of the impact of the 1957 decentralisation and with Lardy's interpretation of the evidence on differentials. In her view, the poorer provinces (Kansu, Tsinghai and Sinkiang) obtained a higher proportion of provincial budgetary health, education and welfare expenditure only as a result of

spillover from the nuclear sites located there — since they are sparsely populated, the absolute increase in such expenditure was very small;<sup>93</sup> furthermore, Lardy's data are incomplete (both in terms of provincial and yearly coverage), biased in favour of his conclusions (mainly on account of allegedly deliberate misreporting by subtle accountants in rich provinces), and exclude enterprise, trade union, street collective and commune financed welfare services which (it is claimed) have become increasingly important and have grown more rapidly in richer provinces; finally, a parallel set of arguments are advanced for the case of provincial investment, supplemented by the point that an important component of investment in poorer provinces was under central finance and control. Space precludes full discussion of Lardy's convincing replies to most of these points (1976) — to take one instance, he is able to show that in the mid-1950s, extra-budgetary outlays constituted a very low proportion of social welfare expenditure, and much of these may have been incorporated into the state budget after 1958. Furthermore, updated evidence on central-provincial revenue sharing rates (showing net provincial remittances to or subsidies from the centre) make quite clear that the central government has consistently carried out a redistributive fiscal policy in favour of poorer provinces.

## V

### Summary

The main conclusions of this paper are the following:

(1) Chinese data are sufficiently extensive and reliable to build a reasonably comprehensive and informative macroeconomic profile of the Chinese economy. There is now fairly wide consensus about physical output data for the agricultural and industrial sectors and, insofar as alternative estimates still exist, the differences between them can be accounted for.

(2) For most variables except population, the USCJEC (1975) provide a plausible minimum series, probably not too far from the 'true' series in the case of agricultural and industrial production, but probably a substantial underestimate in the case of GNP. For the period 1950-75, intermediate estimates between the USCJEC and Chinese official data (when these differ) yield growth rates of 3.2 per cent for foodgrain production and of 12.1 per cent for industrial production, (or 2.5

per cent and 9.3 per cent, respectively, for the period 1952-75). This performance record is certainly not poor, nor is it just passable, either by historical or by contemporary comparative standards; on the contrary, it is rather good, though in terms of growth rates *per se*, it has been exceeded by, for instance, the Soviet Union during the early decades of her development, and a few rather unusual LDCs today, such as Singapore and South Korea. The same applies to the 6.4 per cent GNP growth rate which is obtained as a result of the USCJEC GNP evaluation procedure (5.5 per cent for 1952-75).

(3) The available evidence suggest that during recent years, China has had considerable success with population control policies. Late marriage and improvements in contraceptive technology together with employment and rising living standards for everyone — all within a socialist organisational and ideological environment — seem to have enabled the Chinese to achieve very substantial reductions in the birth rate. These have been large enough (possibly reducing the birth rate to around 23 per 1,000) to offset the marked decline in the death rate, and perhaps to produce a population growth rate not all that much higher than 1 per cent per annum during the last couple of years.

(4) (2) together with (3) mean that China's macroeconomic record expressed in per capita terms is rather good, bearing in mind that it was achieved over as long a period as a quarter century. An intermediate estimate for the growth rate of per capita GNP between 1950 and 1975, using the USCJEC methodology and slight adjustments to it, is 4.9 per cent per annum; the rate for the shorter period 1952-74 is 4.1 per cent, with a corresponding rate for per capita total consumption of 3.3 per cent. The latter is reduced by very little when a (crude) adjustment for expenditure on military consumption is made. However, because of the methodology used, all these national income and product estimates have to be regarded as minima.

(5) The respectable output growth rates described above together with the Chinese approach to questions of income distribution enabled the Chinese to achieve mass living standards for all. Pricing policies (e.g. *vis-a-vis* housing and food necessities), provision of social income in the form of health, education, etc. subsidies, and rationing have been combined to create a consumption floor below which no one is permitted to fall. In addition to this, a highly



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efficient system for the distribution of commodities, based on an extensive wholesaling network, has been developed in order to ensure that the goods which people wish to buy are actually on sale in the shops.

(6) Because it has been Chinese policy to break the link between consumption differentials and income differentials, consumption differentials are narrower than income ones. However, the focus by many critics on the extremes of Chinese income distribution have led them to overstate the degree of overall inequality. Nonetheless, far from negligible differentials still exist, although the orders of magnitude are *very* low by comparative international standards. The Chinese planning process has the capacity both to prevent inter-regional and inter-commune differentials from increasing (a point not recognised by many China critics), and the currently available evidence suggests that at least it has been successful in the former respect; insufficient information prevents any appraisal of the latter situation. However, during recent years, the government has introduced various policies more or less explicitly designed to further reduce inequality.

(7) During two-thirds of the period under consideration, the strategy pursued to achieve these results was rather different from the one which had been applied in the Soviet Union over a quarter of a century earlier. Faced both with new problems and with new alternatives, the Chinese decided to abandon the Soviet-style 'heavy industry first' approach and implement a new strategy — that of 'balanced development', popularised by the slogan 'agriculture the foundation, industry the leading factor'. Theoretically this entailed both socio-political inter-relationships between classes and economic ones between sectors regions and techniques ('walking on two legs'), and was framed as the best way for China to achieve rapid industrialisation with rising living standards under socialism. Although it achieved these goals, its apparent superiority over the Soviet approach can be misleading, since different historical experience and political circumstances meant that the Chinese communists faced a choice which the bolsheviks had never had.

(8) Although formulated in the mid-late 1950s, the policy was actually implemented after the 'three bad years' in 1960. The increased inputs for agriculture were generated partly by

changes in the growth pattern of investment shares within heavy industry, and partly by the creation of new rural enterprises financed by local resources. The latter was possible because with planning decentralisation, the state adopted a new policy towards the extraction of the economic surplus; this was essentially split into two parts — 1) the state part, of which the collection was (after 1957) carried out on a decentralised basis by state authorities (mainly at the provincial or the municipal level), but of which the utilisation was largely controlled centrally after substantial consultation with the decentralised levels, and (2) the collective part which, as a result of the tax and pricing policies towards the agricultural sector, was almost certain to increase annually. The aim of the latter was to achieve greater output and surplus than would occur under complete state control: in other words, after decentralisation, much of the subsequent *increase* in surplus generated in rural areas could be retained there to finance self-reliant rural development projects, particularly collectively owned small industry. Whether or not these policies merely reduced the extent of agriculture's contribution to accumulation in the rest of the economy or turned it into a net deficit sector is not clear.

(9) Quantitatively, the new policy was successful in raising agricultural growth. As compared with 2.3 per cent during the period 1952-57, the agricultural growth rate during the period 1963-70 was 3.9 per cent, and over the longer period 1963-75, 3.5 per cent, with remarkable stability in individual years. This experience — the beginning of the Chinese equivalent of the Green Revolution — ultimately led to self-sufficiency in foodgrains and provided a firm foundation for economy-wide development of sustained industrialisation and of rising living standards.

### Notes

[This paper integrates material from two others: "Balanced Development: Maoist Concept and Chinese Practice", which appeared in *World Development*, April 1976, and "A Quarter Century of Chinese Socialism: Macroeconomic Performance and Social Progress", paper to be presented at the 30th International Congress of Human Sciences in Asia and North Africa, Mexico City, August 1976. I should like not only to reiterate my thanks to those whose contributions I acknowledged in these papers, but also to

record my debt to Joan Robinson for her useful suggestions, to David Lehmann for both unrelenting argument and frequent encouragement, and most especially to Bob Rowthorn, from whose 18 pages of criticisms the paper has benefited very substantially.]

- 1 All subsequent references to these apply to the American Joint Publications Research Service two-volume translation (Mao Tse-tung 1974). A very valuable general appreciation of these writings has been made by Gittings (1974), and an appraisal of Mao's political economic writings by Levy (1975) and Forster (1976).
- 2 E.g. Eckstein (1973), Rawski (1973), Perkins (1975), Swamy (1973), and, of course, the official Chinese.
- 3 Comparing China with India seems to exert an irresistible attraction for some development economists. Probably the most widely known study is that by Swamy (1973), who attempts to demonstrate the substantial superiority of the Indian record up until that time (and on which we shall have cause to make fairly critical comments). Earlier studies include Raj (1968), and Bhattacharya (1973). More recent attempts have been made by Weiskopf (1975a and b), who presents the various estimates without any in-depth comparative evaluation of them, Byres and Nolan (1976), who present an extremely stimulating analysis of the reasons for the differences between China's and India's economic performance, but do not examine the 25-year quantitative record *per se*, and numerous others best not mentioned since their political beliefs lead to temporary loss of their economic sense.
- 4 Sinha's paper is a classic example of the view that nothing whatsoever can be said about Chinese macroeconomic performance. He surveys the varying estimates of foodgrain output that have been made at one time or another during the last ten years, and appears to argue that all are equally likely to be accurate — despite the fact that this is an area on which there has emerged a strong consensus during recent years (see section 1.4 below). Also he seems at times to imply that China is the only country with whose agricultural data one faces problems of interpretation and accuracy (see further below).
- 5 The descriptions below are only designed to capture the chief differences between the alternative series. The original source should in each case be consulted for the full methodology.
- 6 Data for this period are published in "Ten Great Years", State Statistical Bureau, Peking, 1960.



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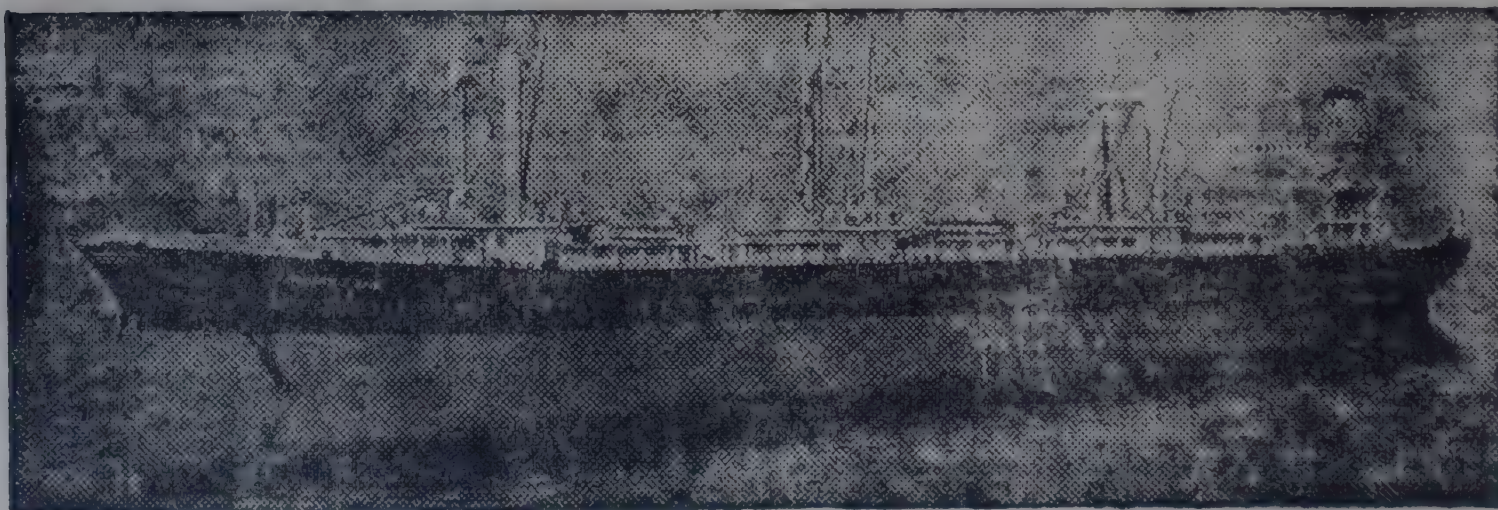
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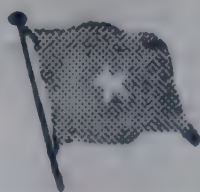
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- 7 Here it is worth repeating Clark's comment (1976) that Aird "accepted ... that the Chinese population was growing at a rate of over 2 per cent per year, and he has gone on *woodenly* adding these percentages to the original census figure, to end up with over 900 million for 1974" (p 241, *italics mine*). However, Clark goes on to understate China's population because of his mistaken conviction that the food supply situation has been and still is very poor.
- 8 This of course introduces all sorts of biases in his per capita production series.
- 9 Although Taiwan's 1975 population was approximately 16 million, a figure of 12 million seems to have been used in the compilation of the UN estimates.
- 10 The recommended marriage age was raised to 25 for women and 28 for men.
- 11 It was only after the establishment of communes that many rural women entered the labour force.
- 12 The freezing/fall in living standards during the crisis years around 1960 may have had a delaying effect here.
- 13 Though the effect assumed here is much less extreme than that assumed by Konovalov (see below).
- 14 Further support for the view that during the last decade there has been a significant and accelerating decline in the Chinese birth rate is provided by Ullerich (1973) who, during visits to more than a dozen villagers and communes, nowhere found a population/family ratio of more than 6 — in most cases, it was between 4 and 5, and in some cases below 4.
- 15 For instance, by the late 1950s, the Chinese announced that they had reduced the death rate to 11 per 1,000 (though this probably applied to the more advanced areas rather than the entire country at that time). In 1973, Ajit Singh and myself were told that the death rate in Shanghai (city plus suburbs) was as low as 6.84 per 1,000.
- 16 See for instance Sidel and Sidel (1975).
- 17 This information was all provided by T N Krishnan of the Centre for Development Studies, Trivandrum, who very generously made available the results from his own unpublished research.
- 18 From the Great Leap onwards, virtually all women of working age in China entered the labour force, while in Kerala, female participation rates are certainly very low. According to the 1971 census, the proportion of workers in the female rural population was 20.9 per cent and in the female urban population, 13 per cent (as compared with 47.4 per cent and 46.0 per cent respectively for males).
- 19 Here we have taken it to be 1972,

the year of its publication in Russian. Perkins (1975b) suggests that it was 1970, without giving any reason. The English translation is grossly misleading, since it implies that it was for 1975, the year of its own publication.

- 20 More precisely, Konovalov argues as follows: "In the PRC's first decade, the birth rate was very high, with 40 births per 1,000 persons in the late 1950s. This was largely due to the favourable conditions for the formation of new families: the ending of wars, transition to peaceful construction, the agrarian reform and the sharp changes in employment among the rural and part of the urban population. That was when there was a drop in the average marrying age, first in the towns, and then in the countryside, something that led to an absolute increase in the number of births to women aged from 15 to 19 and especially from 20 to 24, which had a decisive effect on the birth rate as a whole. ... In 1950, there were roughly 120 million women in the 15-45 age group, with no more than 60 million of these being actually married (undissolved feudal marriages apart). By 1955, the number of women in this age group was up to 140 million, and by 1960 — to 158 million, whereas the number of married women increased over the decade to 110-115 million (by 50-55 million) ... Most children were born to women in the 20-24 and 25-29 age groups, whose number in 1960 was already up to 62 million, or about half the number of all married women, but they accounted for as much as 65-70 per cent of the total number of births.

... But it was the rapid lowering of the death rate that was the main cause behind the higher population growth ... from 1949-1959, infant mortality was down by 70-75 per cent, to 75 per 1,000 (in the towns) ... The mortality structure was also changed as a result of a sharp drop in the number of deaths from cholera, the plague, smallpox, bilharziasis, and other diseases ... Over the PRC's first half-decade, the average death rate was down by one-half, to 12-14 persons per 1,000 ...

... In the 1960s, there was a sharp change in the reproductive pattern ... In 1960, there were 24 million women in the 20-24 age group, in 1965 — 26 million and in 1970 — 35 million. As the marrying age went up in the 1960s to 25 for women and 28 for men, the child-bearing sections were reduced by 90 million that is by an average of 9 million per year. 'Deferred marriages' reduced the number of births ... by 30-35 per cent, that is by 7-8 million a year'.

Konovalov goes on to adduce malnutrition and a non-existent 'statutory' limitation on the size of families as further reasons for

a sharp decline in the birth rate during the 1960s. That the existence of malnutrition was extremely improbable is clear from 1.2 below. He does not produce any figures to make the extreme difference between his estimated population growth rates between the late 1950s and early 1960s seem reasonably plausible. Indeed, even assuming that the death rate only declined an additional 2 per 1,000 to 10-22 per 1,000 (on his figures) during the 1960s, a 33 per cent drop in the birth rate would only reduce it to 23-27 per 1,000, producing a growth rate of 1.3-1.5 per cent, which in turn is much too high to yield his total population figure of around 800 million in 1972.

- 21 For details, see Table A1.
- 22 Many of these are listed in Orleans (1975) and Clark (1976).
- 23 Also, since at the same time as he announced that China's population was almost 800 million, Chou also reported that it had increased by 60 per cent since Liberation, a substantial downward revision of the official Chinese estimates for the 1950s is implied.
- 24 But not among commentators like Clark (1976), who uses lower estimates without providing any justification for them or explanation for his decision to ignore the official statistics.
- 25 For detailed references to these, see Stavis (1976). But again, sceptics still continue to bury their heads in the sand — for instance, Clark (1976) persistently refers to the 'fact' that the Chinese are trying to cultivate their country 'with hand hoes', ignoring completely all the evidence and information about improved inputs to the agricultural sector (see also section 4.2 below).
- 26 Thus Sinha (1975) was able to report 15 different estimates of foodgrain production made at various times during the later 1960s and early 1970s. What he fails to point out, however, is that (1) certain of the series which he reports have subsequently been modified (thus the 1975 USCJEC report revised the series presented in the 1972 edition), and (2) for *objective* reasons, certain of the series which he reports were always regarded as rather unreliable. At this point, it is also worth commenting on Sinha's whole agnostic approach, i.e., that all data on Chinese agriculture are equally unreliable, and that since nothing can be known with complete certainty about it, nothing at all can be said about it. All this ignores the fact that in most cases, the differing assumptions on which alternatives estimates are based (or guesses, as the case may be), can be appraised with a fairly high degree of objectivity. Sinha's paper also displays remarkable ignorance about the problems with obtaining and interpreting agricultural statistics in



- most LDCs.
- 27 This of course does not affect the overall growth rate, which is the same for both series. In any case, if the more unfavourable production figures are taken in turn with the Aird, Orleans and UN adjusted population estimates, the trough in unhusked per capita output works out at 219, 225 and 2 kg respectively, i.e., 175, 180 and 18 kg husked. This compares, for instance, with an average per capita production of 178 kg over the year 1971-74 for India.
  - 28 See Swamy (1973), Ishikawa (1965). Swamy's figure is based on the following extraction ratios for individual crops: 0.72 for rice, 0.85 for wheat, 0.92 for miscellaneous grain, and 0.92-1.00 for potatoes and tubers. Since these were based on a 1962 report in *Current Scene*, it is possible that since then the introduction of new varieties (and possibly improved harvesting methods) have raised these a little — FAO data for 1968 on other S and E Asian countries, reported in Swamy, show that although the Chinese extraction ratios were above the average of those for other countries, somewhat higher ratios for rice and for wheat had been achieved elsewhere.
  - 29 Though, to my mind, no conclusive case has been made for ignoring the period during which a war-torn economy which has had most of its productive base destroyed reaches pre-achieved levels — surely the speed with which it can effect reconstruction is a key element in the evaluation of its economic performance.
  - 30 On a 1949/52-1972/75 basis, the value is 2.9 per cent (3.1 per cent).
  - 31 Note here that the Indian figure is based on the unprecedentedly high figure of 118 mmt for the terminal year which, on the basis of the previous performance of the Indian monsoon cycle, may not again be achieved for a few years (quite apart from the difficulties which have arisen on account of the decline in producer prices during this bumper harvest and which have, in some areas, led farmers to shift cultivation away from foodgrain crops).
  - 32 Here it is instructive to note information obtained by Neville Maxwell of the Institute of Commonwealth Studies, Oxford, during a recent visit to China. He found that in some communes, rivers were being redirected into straighter courses, so that the land which had until then been taken up by river bends could be reclaimed.
  - 33 Government of India, "Pocket Book of Economic Information", 1973 and 1974.
  - 34 Even if the highest Chinese population estimate is used, the number of years when this happens is only increased from 2 to 3.
  - 35 These figures are based on reports of actual production unlike the detailed estimates made by the FAO.
  - 36 This of course is in terms of gross output, not net value added. Using the Liu-Yeh methodology, Swamy (1973) estimated net value added for the years 1952-70, and for the period 1952-57, presents sufficiently detailed data for the outcome of the 2 methods to be compared. In fact, it turned out that growth in net value added over this sub-period was very slightly higher than that of gross output value. However, no simple inferences can be drawn from this since he makes the calculations of the final figures in terms of Indian prices, derived from his somewhat controversial purchasing power conversion.
  - 37 Given the difficulties with the interpretation of compound growth rates on account of selection of appropriate initial and terminal years, the significance of this result should not be overemphasised.
  - 38 This procedure, and the statistical difficulties with it, are explained very clearly by Field, Lardy and Emerson (1975).
  - 39 For instance, growth rates are affected by changes in industrial organisation *per se*, irrespective of the output level, and by the weighting which results from the fact that differences in the degree of vertical integration affects industry shares.
  - 40 For instance, the claim that unduly high prices are used for new industrial commodities in such a way as to introduce a serious upward bias in the index.
  - 41 Here it should also be noted that Field's earlier indices provided lower estimates of Chinese industrial performance than does his recent one.
  - 42 For instance, during the First Five-Year Plan the Soviet Union had an annual compound industrial growth rate of 18 per cent for capital goods, 28 per cent for all machinery and 12.5 per cent for consumer goods, Bulgaria 11.0 per cent for all industry during 1950-73, S Korea 16.9 per cent during the 1950s, and 17.6 per cent during 1960-73, Singapore 14.8 per cent during the 1950s and 15.4 per cent during 1960-73, etc. ("UN Yearbooks of National Accounts Statistics").
  - 43 The comparison with India can be seen in a different way by an examination of growth in total and in per capita production of selected commodities. Whereas in 1951, per capita production levels of a number of key commodities (e.g., coal, fertilisers, cement, iron) were about the same (with India, if either, having the edge), by 1974, China had overtaken her in every case except for cotton cloth (see Bhattacharya 1974, and Byres and Nolan 1976).
  - 44 The main alternatives are those by Liu and Yeh (1973), Clark (1976) and Swamy (1973).
  - 45 Within this period, per capita GNP naturally reflected the uneven growth of the agricultural and industrial sectors described in the previous 2 sub-sections.
  - 46 Because the share of trade in Chinese GNP has been so low (around 3 per cent), shares in GDP can be treated as approximations for shares in GNP. In fact, as self-sufficiency in foodgrains was achieved, the share of investment goods in imports tended to rise, so that a slight adjustment is called for to make the share of investment in GNP rise a little faster than its share in GDP.
  - 47 We do not enter here into the further problems raised by the USCJEC methodology for transforming this index into \$US per capita. Suffice it to say that this is an extremely difficult exercise subject to considerable error; undue reliance should therefore not be placed upon the absolute product levels in terms of \$US which are calculated as result of it.
  - 48 The total output value of light industry has nearly doubled in the nine years from 1966-74, and the average annual increase during this period was double that for the previous 16 years (NHNA, January 8, 1975). Retail sales in 1974 were eight times those in 1949 (NHNA October 10, 1975).
  - 49 The main commodities now on ration are grain, cotton cloth, and cooking oil.
  - 50 See further below.
  - 51 Lardy (1975, 1976).
  - 52 This problem frequently arises in Khan's paper (1976).
  - 53 The following summary is taken from Paine (1976a).
  - 54 Reynolds (1974) reports a 3 to 1 differential; he also reports that the highest salary in China at that time, for a state government official, was 450 yuan.
  - 55 The richest commune included was a showpiece suburban one which was, of course, atypical, but the sample did not include any from areas which had suffered natural disasters flood or drought and which would consequently have increased the maximum differential observed.
  - 56 The range between the lowest rural and highest urban incomes is obviously many times greater.
  - 57 This arises because a rich commune, for instance, could only continue to establish 'unapproved' new industry to the extent that it could provide all the inputs and consume or use all the output itself since extra-commune purchases or sales occur via the intermediation of the state.
  - 58 See further Keesing (1975), p. 9. Howe (1973) argues that urban-rural differentials rose somewhat during the 1950s but declined during the 1960s.
  - 59 See further Section 4.3 below.
  - 60 The experience up until 1973 is set out very clearly in Singh (1973).



- 1 See further Mao Tse-tung (1957). That class contradictions are still important in China was reiterated by Chou En-lai in his interview in 1971 with William Hinton and has been made particularly clear during the debates after Chou's death. Chou himself wrote: "In the countryside, under socialism, classes still exist. There are of course some special places where old exploiters are few in number or even absent... nevertheless... all around these spots there are communities that have many former exploiters. In most cases land reform took place only 20 years ago (1949-52), so there are ex-landlords and rich peasants in large numbers almost everywhere. As for the offspring of these people, ... (although many) never took part in exploitation... the influence of their parents on them may be quite deep. If you take the total as 7 per cent and realise that there are over 600 million rural people, then the ex-landlords and rich peasants number over 40 million. If half of them have been transformed, the total of unreconstituted persons is still over 20 million and this is putting the best light on the matter because it is not easy to transform them. As for the cities, ... there was a bourgeois group that owned and operated profit-making enterprises... After (the) shift to socialist ownership, we paid interest to the capitalists based on the estimated value of their property... They got back just about half of what they had invested — 450 million US dollars. When the Cultural Revolution broke out, the masses wouldn't allow the banks to pay out any more interest on private capital. At this point, the bourgeoisie didn't dare demand it, so the payments ended. But after all, these people still constitute a bourgeois class. Furthermore, their number is quite large. Their percentage in the cities might well be higher than that of the landlords in the countryside. We figure 10 million people altogether counting in all family members." (Interview reprinted in *China Now*, 53, 1975.)
- 62 See for instance Gurley (1971), Schurmann (1968), Gray (1973), Singh (1973), and Hoffman (1974). Chapter 1; recent contributions include Reynolds (1975), Keesing (1975) and Berger (1975).
- 63 See further section IV below.
- 64 That an understanding of the Maoist concept of 'balanced growth' is an essential prerequisite for analysis of the actual Chinese development process seems obvious. Unfortunately, however, it appears still to have escaped certain American economists like Dernberger (1975), who writes (p 476): 'The meaning of the policy-mix referred to as a "balanced growth" policy simply means the Chinese decision makers select those policy choices available to them so there is no excess demand for resources'. [A similar view is expressed by Roll and Yeh (1975, p 90).]
- 65 As Schurmann has pointed out (1968 p 80), the Chinese use a primarily *political* criterion to distinguish between the latter: 'heavy industry consists of industries strategically important for the development goals of the regime; whatever remains falls into the category of light industry'. In practice, however, their usage does not seem to differ substantially from that adopted in the West — roughly speaking, Chinese 'heavy industry' covers producer goods, and 'light industry' consumer goods [see also Rawski (1975) p 221 and 224].
- 66 These two arguments have frequently been reiterated elsewhere. Thus in 1957, Liu Shao-chi (who supported the Maoist programme at that time) had argued: "But there are also some comrades who one-sidedly stress the idea of developing heavy industry; they want to cut down on the rate of development of light industry and other economic sectors... They do not understand that: (1) since the people's need for consumer goods is constantly growing, if we do not properly develop light industry, conditions of commodity scarcity can appear, which will (adversely) influence the stability of prices and the market... If industrial commodities in sufficient quantity are not available to be exchanged at stable and rational prices for farm goods, then this will obstruct consolidation of the worker-peasant alliance, and will also (adversely) influence the development of agricultural production. (2) Capital investment needed by light industry is relatively small; the duration of enterprise construction is relatively short; capital circulation is relatively quick; therefore capital accumulation is also relatively quick. Capital accumulation by light industry can be used to aid the development of heavy industry." [Report to 8th Party Congress, quoted in Schurmann (1968), pp 81-2.]
- 67 Although Bukharin's own position on this question seems to have oscillated during the mid-1920s, in general, the Right Opposition believed that a mixed system of peasant agriculture and state industry could ultimately (and smoothly) grow into socialism. However, they never came to grips with the dynamic consequences of the agricultural policies which advocated, in particular which most resulted in the strengthening of the kulak class, and appeared to have believed that this could be avoided by growth of co-operatives — failing to recognise the key role the kulaks themselves would play in determining the nature and role of the co-operatives.
- 68 Also — though it is not discussed in the above-mentioned article — agriculture and light industry make an essential but more indirect contribution by producing the exports required to obtain the inputs necessary for industrialisation. In 1959 over four-fifths, in 1970 almost three-quarters, and in 1973 two-thirds of Chinese exports were agricultural products or textiles and clothing [Usack and Batsavage (1972), Chen (1975b)]. The recent attainment of self-sufficiency in foodgrains is particularly important in this respect, since previously any deficiency in domestic output meant that foreign exchange had to be allocated for foodgrain imports (see further p 29, fn 3 below). This situation has recently been transformed somewhat by China's emergence as a prospective major oil producer with consequent export and foreign exchange earning potential.
- 69 A further clear statement of this argument is given in *News from Hsinhua News Agency*, Weekly Edition 353, Thursday, November 13, 1975. A more 'popular' summary of the arguments for intersectoral balance is given in "Going in for Agriculture in a Big Way", *Peking Review*, 23, June 6, 1976.
- 70 From the political standpoint, mechanisation would represent the third phase in the development of the worker-peasant alliance — the first being land reform, and the second, the co-operative movement. "Now our worker-peasant alliance will go a stage further by establishing itself on the basis of mechanisation", (*Wan-sui*, p 256).
- 71 For an excellent appraisal of the rationale for and achievements of the Great Leap, see Lippitt (1975).
- 72 "We have put forward the simultaneous development of industry and agriculture for four years already. Actually we did not put it into practice until 1960" (*Wan-sui*, p 277). Many elements of what has subsequently become known as the Maoist approach had been introduced in Yenan during the war against Japan, including not only the sending down of cadres to villages and the mobilisation of almost all the rural population, but also economic decentralisation, encouragement for rural industry, and a refusal to give excessive priority to investment in producer goods for use in heavy industry [see further Selden (1971) Ch 6, and Gray (1974) pp 124-6, and Gurley (1975b)].
- 73 This emphasis on improved agricultural technology comes out clearly in Mao's 8 point charter for agriculture — soil improvement, rational application of fertiliser,



- irrigation, improved seed strains, rational close planting, plant protection, field management, and improvement of farm implements. For reports on progress by the end of 1975 under each of these heads, see *NHNA Weekly Issue*, No 354, November 20, 1975.
- 74 For instance, according to *NHNA*, during the first 10 months of 1975, the output of rice planters rose by 30-60 per cent and mechanical sowers by 100 per cent and during the first quarter of 1976, supplies of chemical fertilisers, internal combustion engines and tractors rose by 40 per cent and those of insecticides by 23 per cent. *Peking Review*, 20, May 14, 1976, surveys the development of producer goods for agriculture during the Fourth Five-Year Plan (1971-75): "The amount of steel used for making farm machinery and building water conservancy projects in 1975 was 3.5 times that of 1970 ... In addition to 28 large and medium-sized chemical fertiliser plants set up over the past five years, 700 small ones, each with an annual capacity ranging from 10,000 to 30,000 tons of synthetic ammonia were also built. A chemical fertiliser industry has been established in all the provinces, municipalities and autonomous regions. Annual national output of chemical fertiliser was 2.5 times that of five years ago. Between 1971-75, production of irrigation and drainage equipment and tractors and walking tractors was up 3.3 fold and 8-fold respectively ..."
- The article continues with details of the expansion of such industries in Kwangsi Chuang Autonomous Region and in Hunan province, as well as of progress towards mechanisation ("96 per cent of the counties and many people's communes have factories for making and repairing farm machinery. In 1975, China produced more than 1,800 kinds of farm machines ..."). It also reports that 2,800 small cement plants have been built since 1970.
- 75 From Chou En-lai's report to the 4th National People's Congress in 1975. By 1972, chemical fertilisers supplied around 30 per cent of total crop nutrients (Stavis 1974).
- 76 *Peking Review*, 20, May 14, 1976.
- 77 Although the early attempts during the Great Leap Forward based on indigenous technology were unsatisfactory during the 1960s, the Chinese successfully developed a modern based small-scale technology.
- 78 Thus Erisman is probably correct in suggesting that the *Peking Review* (Jan 14, 1972) report that small plants produced 60 per cent of all domestic chemical fertiliser output overstates their role as the percentage in terms of nutrient weight would be lower. Also fertiliser from small plants has to be produced at the appropriate season and distributed quickly as it decomposes quickly. However, the benefits from small plant fertiliser production are considerable. As Chao puts it (1975, p 7.7). "The equipment for small plant can be easily manufactured within the country, so that no foreign exchange is required. Constructing such plant takes only a short time, usually five or six months for a unit with an annual capacity of 3,000 tons of synthetic ammonia. The compact equipment and the simple technique can be easily handled by unskilled workers so that the plant can employ farmers and their families on a part-time basis. The labour costs are thereby reduced substantially. These plants utilise the widely scattered resources which have low opportunity costs due to the poor quality and the small quantity available. Small plants are preferred also because they can be constructed throughout all farming regions so that the transportation costs of distributing fertilisers can be reduced. The savings on transportation costs compensate for the higher production costs."
- 79 Quantitative estimates of these increases are given in Erisman (1972), Perkins (1975b), Gurley (1975a) and for recent years *Peking Review*, 20, May 14, 1976. Space precludes full discussion here of recent developments in Chinese rural industry. Plants may be collectively owned (usually by a commune or production brigade) or state owned (usually under county leadership). Higher level control over collectively owned plants varies according to the extent to which inputs are obtained from outside or outputs used outside the commune. Both the more important county factories and the larger commune and brigade enterprises would be included in the province plan. Counties have been encouraged to establish the 'Five Small Industries', that is iron and steel, cement, chemical fertilisers, energy and machinery. Profits from commune factories would be used to provide the commune's social services and to set up new small industries — they are paid to the state in the same proportion as the state's share in financing the initial investment. See further Sigurdson (1972, 1973, 1974, 1975a and b) and Gurley (1975a).
- 80 In the late 1960s, these were located mainly in the Pearl River Delta, Lower Yangtze Valley, Szechwan, Wuhan, Fukien, Tung-tin Lake, Peking-Tientsin area, T'aiyuan, Honan, and the North-East [Stavis (1974)].
- 81 See further Wiens (1975).
- 82 *Ibid*, p 20. The average yield per hectare increased from 2700 kgs in 1975 to about 4000 kgs in 1971, over twice as high as those for Thailand, India and the Philippines (Perkins 1975a).
- 83 Further information about newly developed HYV strains is reported in *News from Hsinhua News Agency*, Weekly Issue 327, May 15, 1975, pp 15-16, and *NHNA Weekly Issue* 354, November 20, 1975.
- 84 Lippit (1974) estimates that the land reform led to the redistribution of more than 9.39 billion yuan (in rent, interest and hired labour costs) to the poor and middle peasantry, of which 5.04 billion yuan were extracted by the state through taxation and control over the terms of trade with the industrial sector. Altogether, this 5.04 billion yuan amounted to 44.8 per cent of the 11.26 billion net investment in 1952, or 34.7 per cent of the 14.52 billion yuan gross investment in that year. (Of this, agricultural taxation accounted for 8.0 per cent and 10.3 per cent of gross and net investment, and manipulation of the terms of trade accounted for 26.7 per cent and 34.5 per cent respectively of gross and net investment [Lippit 1974, pp 122-3].) However, when the government introduced the order putting into effect the 'Unified Purchase and Supply' of grain into effect, price incentives were given to persuade the peasantry to sell their supplies to co-operatives. For details of this, see Shue (1976).
- 85 See further Lippit (1975).
- 86 See further *Peking Review*, May 9, 1975. In addition to the above measures, certain financial reforms were also introduced in the early 1960s to provide the necessary financial infrastructure for the success of the new policy of agricultural priority. For instance, in November 1963, a state-owned Agricultural Bank of China was opened as a specialist agricultural finance institution, much more sophisticated than any of its predecessors. This (and its branches) provided loans at low, or in special cases, zero interest rates. See Miyashita (1969), Burki (1969). Cassau (1974) describes the current position.
- 87 This was in addition to the other aspect of decentralisation, i.e., decentralisation of the extraction of the state's part of the economic surplus, plus more democratic but primarily centralised control over its subsequent utilisation (see further below).
- 88 Thus state revenues have accrued increasingly from profits and taxes from state industrial enterprises — these amounted to 90 per cent of state revenues in 1974 as against 34 per cent in the early post-liberation years.
- 89 Associated with this is what could be called the 'cellular economy'



hypothesis (see, for instance, Donnithorne 1972), i.e., that provinces would become increasingly independent, with trade between them sharply curtailed, and so important gains from specialisation lost.

- 90 This conclusion is further supported by the American economist, Alexander Eckstein, who writes (1975, p 355):

"Many analysts of the Chinese economy are convinced that in the last 10 or 15 years, there has been a very significant process of decentralisation in economic management to the point that one could legitimately describe China as a cellular economy ... In contrast to this view, I came away from China with the very distinct impression that decentralisation had been very much less far-reaching than is often believed. Correspondingly the central authorities have continued to maintain a vast degree of control over resource allocation. This conclusion is based on evidence gathered during our trip, principally from briefings and discussion with the Director of the Budget Bureau in the Ministry of Finance, the planning officials of the Shanghai municipal government, representatives of the planning group of the Anshan Iron and Steel Corporation, and planning officials from several other provinces."

- 91 The crude 'cellular' hypothesis is equally ill-founded. In an expanding economy increased production can result from a combination of greater utilisation of 'own' resources and higher 'imports' from elsewhere. Snead (1975) has thrown serious doubt on most of the examples which Donnithorne adduces in support of her hypothesis and has also pointed out the basic economic rationale which underlies the self-reliance strategy, i.e., that as one would expect in an economy experiencing rapid industrial growth, China is facing the pressures of excess demand pushing against limited supplies, and responding to bottlenecks by encouraging all levels of the economy to explore the possibilities for bringing 'own' resources, as yet untapped, into utilisation; in other words, self-reliance does not entail some 'inefficient' (in the neoclassical sense) reallocation of existing resources, but rather the productive use of resources previously unknown, unnoticed, or wasted.

- 92 See further Lardy (1975), pp 44-57 for a detailed description of how this was achieved. Roughly speaking, decentralisation did not just not entail lack of co-ordination but also did not entail substantial loss of central government influence and control. Indeed, around 80 per cent of the taxes collected at the decentralised levels were paid directly to the central government. On the other hand the decentralised level authorities had

control over an agreed proportion of above-target revenues — see further Eckstein (1975). See also Robinson (1973) for an excellent summary of Chinese economic management.

- 93 "Thus the good showing made by the deficit border provinces in the per capita 'HEW' expenditure league after decentralisation provides no reliable indication that the central government was distributing welfare funds across the country. All that it need reflect is that the military expenditure, which after decentralisation constituted a much higher proportion of the Centre's expenditure, went disproportionately to the border provinces, especially in the north-west." (p 331).

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### Assistance by DAC Countries

THE total net flow of financial resources, excluding most Eurocurrency borrowing, from the 17 industrial country members of the Organisation for Economic Co-operation and Development's Development Assistance Committee (DAC), to developing countries, amounted to \$ 38.8 billion in 1975.

This was 1.02 per cent of DAC members' combined gross national product (GNP), compared with 0.81 per cent in 1974. The target level of 1 per cent of GNP for total flows was thus reached collectively by DAC members for the first time. Figures are preliminary, according to the DAC, but it is clear that the 1 per cent level was reached individually by at least seven countries. These were: Belgium, Canada, France, the Federal Republic of Germany, the Netherlands, Sweden, and the United States.



# The Tata Engineering and Locomotive Company Limited

## Statement of the Chairman, Mr S Moolgaokar, for the Year 1975-76

DURING the year under review, despite the recession in the automobile industry, your Company was able to continue its steady growth and to further strengthen its position in the market. In sales, production and exports we achieved the highest ever figures. We produced a record 100 per cent of the installed capacity and rolled out 3,500 more vehicles than in the previous year. Thanks to the marked customer affection for our product, we had no difficulty in selling every single vehicle that we produced. Last year our exports reached Rs 15.6 crores; this year we expect to improve upon this even further. Your Company thus continues, for many years now, to be the highest exporter in the engineering industry.

We believe that this performance is the well-earned reward for our untiring dedication to quality and for the policies that we have followed over the years.

### HOLDING THE PRICE LINE

2. During 1974-75, major cost increases in important inputs took place which were beyond our control. Power rates increased by as much as 70 per cent, tyres by 80 per cent, some bought-out components, dearness allowance and interest rates by about 30 to 35 per cent. The full effect of these increases, which took place at various points of time in 1974-75, was felt during the whole of 1975-76. Additionally, during 1975-76, Central Sales Tax went up by 33 per cent and the Indian Rupee fluctuated adversely against Deutsche Mark by 8 per cent, thus affecting the cost of raw materials and capital equipment imported from Germany.

In October 1974, Government instituted a form of price control on commercial vehicles known as parametric surveillance. This allowed a return of 16 per cent before interest and taxes on capital employed or 9 per cent after taxes on net worth. All forms of price control on commercial vehicles including parametric surveillance were lifted in January 1976. On 4th April 1975, we had made a marginal price adjustment of about 2 per cent. As our country has been fighting to contain inflation,

we have not increased the prices of our vehicles since then even though this meant that we had to let the Company's return on capital employed decline from 13 per cent in 1974-75 to 11.5 per cent in 1975-76.

### PRODUCTIVITY

3. Even this modest return would not have been possible but for the fact that we took several steps to sustain profitability. Cost reductions were effected over the entire range of our operations and worthwhile economies were achieved by better utilisation of direct and indirect materials. Our computer installations have been a great help in achieving more effective materials management. We were able to decrease the stock of raw materials, bought-out components and work-in-progress by as much as Rs 13 crores during the year without creating shortages or adversely affecting production. Finally, many of our ancillary suppliers also initiated their own cost reduction programmes, the benefit of which they passed on to us. All this enabled us to offset some of the cost escalations during the year.

4. As special mention must also be made of two other aspects:

### OUR WORKERS

Our workers, our staff and their unions gave us their unstinted support. Our appreciation of their efforts is very real and sincere. Since manhours lost due to industrial disputes were negligible the highest rates of vehicle production could be achieved and substantial improvements in productivity could be brought about. Our employees have now seen for themselves that the product of their labour is so much in demand and is highly valued by all those who buy it. This has served as an important factor in maintaining the morale of our organisation.

### THE GOVERNMENT AND ITS POLICIES

Government also have rendered prompt assistance to us in a number of important matters; the changed attitude towards industrial relations has itself led

to improvements in the law and order situation which, in turn, have helped increase production.

Some of the recent policy decisions of Government should improve the environment necessary to spur investment and accelerate industrial growth. The investment allowance which was recently introduced in lieu of initial depreciation, and which closely resembles the erstwhile development rebate, should contribute to the revival of fresh investment in industry which, after all, is the crying need of the hour. Particularly for those units, like your Company, which have already embarked on a major expansion, this measure should be of immense advantage in the years to come. Government has also announced a scheme for excise duty relief for increased production. The rationale behind the scheme is sound and it should act as a strong and continued stimulus to maximise capacity utilisation and to increase production. Government have also announced several changes in the industrial licensing policy in the course of the last year which are all welcome and realistic though, for an undertaking registered under the MRTP Act, as your Company is, a caveat is almost religiously entered.

### THE CUSTOMER

5. The problems and the needs of our customer continue to be the centre of our attention. During the last year, we have substantially increased the availability of critical spare parts which were in short supply. As a result, with the exception of a few items, which happen to be supplied by the ancillary industries, all the other items of spare parts for the various models of Tata vehicles are now readily available. We trust that this will enable us to maintain even better relations with our numerous customers.

We also launched a special campaign to teach proper preventive maintenance to our customers, even in the most remote areas. Similarly, in conjunction with the nationalised transport undertakings, we embarked upon another successful campaign to achieve maxi-



imum fuel economy in the operation of Tata buses. Such campaigns now form a regular feature of our customer service and are greatly appreciated by all concerned.

#### LOOKING AHEAD

6. The tempo of our expansion activities was fully maintained throughout the year. Though funds were scarce, adequate amounts were set aside for the expansion programme, for research, design and development and for training and maintenance. With the help of the new facilities that are being installed, we are planning to produce this year even more vehicles and spare parts than in any previous year. Prototype development and testing of the aggregates of the new heavy vehicle to be produced at Poona continue at full pace and we are confident of implementing our expansion programme according to schedule. The only worrying factor is the shortage of power in this area.

#### THE STATE OF THE ROAD TRANSPORT INDUSTRY

7. You will no doubt agree that, in the long run, the prospects for the commercial vehicle industry — in which your Company occupies a position of pride — cannot be much brighter than the prospects for the road transport industry. Unfortunately, road transport is today an impoverished industry, primarily because throughout the year or more, economic activity in the country has been at a low ebb; and about 30 per cent of the trucking capacity has remained idle. This has led to undercutting of freight rates and a consequent shrinkage in the earnings of the operators. As a matter of fact, freight rates today are about the same as those prevailing two years ago while, during the same period, operating costs have increased by over 30 per cent.

8. It is perhaps not well known that road transport is a widely dispersed and largely unorganised activity. Almost 90 per cent of the transport operators own only a few vehicles each; the industry has considerable employment potential, it is vital and strategic to the entire nation, and it contributes sizeably to Government's revenues. This industry therefore deserves relief, both from the commercial vehicle industry and from Government.

9. The help which the commercial vehicle industry should offer in this direction is specific. Firstly, it should keep on improving its products so as to secure longer life and lower operating costs; secondly, it should keep price in-

creases to the absolute minimum that may be necessary. As you know, your Company has been doing precisely this, and has resolved to do so in increasing measure in the future.

10. But the help which Government can offer spreads over a wider range. As much as 35 per cent of the retail price of a Tata truck, as also of its annual running costs, is on account of direct and indirect taxes. If it is only Government that can thus help the operator by reducing the burden of taxes, and by eliminating such road-blocks as the numerous octroi and other check posts.

#### NATIONAL HIGHWAYS

11. Similarly, despite repeated representations to Government by several organisations, the need for a higher allocation of funds for the development of our national highways is somehow not yet recognised. In strong contrast to the position obtaining in many other developing countries, the majority of our national highways — the arteries of our nation — have large patches that are narrow, weak and dangerous. Set against this context, the Plan figures fail to provide an encouraging story. In the Fourth Plan, the outlay earmarked for national highways was a little over 2 per cent of the total public sector outlay. But in the Fifth Plan period, the provision of Rs 501 crores is hardly 1.3 per cent of the total. Of these Rs 501 crores, about two-thirds will be spent on schemes which have spilt over from the Fourth Plan. Moreover, during the first three years of the Fifth Plan period (*viz* 1974-77) the actual expenditure is likely to have been a mere 35 per cent and, in real terms, a bare 22.5 per cent of the target of Rs 501 crores. The emphasis now seems to be only on completing the on-going schemes.

12. To me, therefore, it appears singularly unlikely that even the modest target of Rs 501 crores will be achieved. I am, of course, conscious of the need for rephrasing the various Plan programmes in view of the current financial stringency. But I do hope, now that the Fifth Plan is being recast, this important industry will receive its rightful priority, and that steps will be taken to clear a substantial part of the backlog.

#### PROSPECTS

13. Before long the benefits of our expansion programme should begin to accrue to the Company. Your Directors feel that this is an appropriate time to capitalise a part of the Company's re-

serves and to issue bonus shares. They recommend for your approval a bonus share issue in the ratio of one to every five. Barring any unforeseen circumstances, it should be possible to maintain the present rate of dividend on the expanded equity base.

14. Taking a total view, your Company's performance in the last two difficult years has certainly been encouraging, and Management has reasons to feel confident about the future. We have in our favour a number of enduring strengths, a sound financial position, an effective Research and Development team, ample design talent and extensive facilities for the production of a variety of machine tools, various types of capital equipment and a wide range of tooling. Our executive group is eager and of proved competence and our employees and their unions are giving us their full co-operation. I have no doubt that your Company, endowed with these assets and the fruits of our past and current capital investments, will continue to progress and prosper.

*Bombay, 13th July, 1976.*

*Note:* This does not purport to be a record of the proceedings of the Annual General Meeting.

#### Transformers and Electricals

TRANSFORMERS AND ELECTRICALS KERALA (TELK), promoted by Kerala government and Kerala State Industrial Development Corporation in collaboration with Hitachi for manufacture of heavy electrical equipments, has launched on an expansion programme for raising capacity to manufacture extra high voltage power transformers, from 1,080 MVA to 3,000 MVA per annum, and also for undertaking production of 400 KV equipments. The project, estimated to cost Rs 5.64 crores, is proposed to be financed partly by making a public issue of equity capital of Rs 86 lakhs. The programme is already in progress. The company has secured orders for over Rs 30 crores, including an order for 400 KV equipment which should keep the production running for the next two-and-a-half years. The all-India financial institutions and leading banks are supporting the project. The company is likely to enter the capital market sometime next month. Meanwhile, TELK has come out with good results for the year to March 1976, with sales advancing from Rs 6.85 crores to Rs 7.34 crores, and pre-tax profit up from Rs 68 lakhs to Rs 56 lakhs. After-tax profit is Rs 72 lakhs (Rs 52 lakhs).





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# ECONOMIC AND POLITICAL

# WEEKLY

Founder-Editor: Sachin Chaudhuri

Vol XI No 34 August 21, 1976

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## Deeper in the Groove

THE place of exports in our economy today is not quite what it used to be believed to be. In the five-year Plans, for instance, export earnings have been viewed as the means to pay for the imports required by the economy, specially those required for the development programme. The Plans have, therefore, attached great importance to achieving high rates of growth of exports and exports have always received special encouragement in official policies.

The situation today is rather different. Exports, as we all know, have risen fairly impressively in the last few years. Imports, however, have declined in the current financial year so far, resulting actually in a trade surplus. The country's foreign exchange reserves rose by nearly Rs 900 crores in 1975-76 and the rising trend persists. It is interesting that despite these developments, there is no easing of the pressure to step up exports. Judging by the frequency and fervour of official exhortations, there can be no doubt that the government sees larger and larger exports as one of its main objectives. Official support for exports has taken the form of even further liberalisation of the incentives and facilities available to exporters and industries producing export products. In response to a plea by the president of the FICCI, the Commerce Minister readily announced at a seminar on exports in New Delhi in July that cash assistance for export products would now be available for a period of three years and that "if there is a change, it will only be upwards".

The pressure for larger exports today comes mainly from the failure of the economy to absorb current output. Exports are thus required not to finance the import requirements of a development programme, but to use investments already made and capacities already established. The situation of surplus production which has emerged in a number of industries may be traced immediately to the low rates of investment over the last whole decade, and specially to the cuts in investment in the last few years as part of the measures to control inflation. Realisation of this has now led to pleas — including from leading spokesmen of the private sector — that the way out lies through larger public sector investment. It has also been pointed out that the conditions are extremely favourable right now for such a move in view of the relative price stability, the large stocks of foodgrains with the government and the mounting reserves of foreign exchange.

However, it is very doubtful that the public sector can play this kind of pump-priming role, for it too is subject to the same constraints as apply to the economy as a whole. Basically these constraints arise from the unequal distribution of income as a result of which much of the economy's productive apparatus is geared to meeting the requirements of a very small segment of the population. As the Deputy Chairman of the Planning Commission confessed in his Walchand Hirachand Memorial Lecture in Bombay last month: "The large domestic market of India has suffered considerable shrinkage on account of the skewed income generation and income distribution patterns. Consequently, when food production goes up in the economy food stocks are increased, not because everybody's demand for food is fulfilled, but because almost 40 per cent of our population have inadequate purchasing power. Similarly, cheap controlled cloth is piled up not because everybody's need for adequate clothing is fulfilled but once again it is the merciless logic of market economics which demands rupees and incomes to translate human beings' needs into exchange of commodities. Stocks of construction materials like steel bars and rods, etc, go up not because our urban and rural housing problems are solved but due to lack of resources in the public sector to expand housing schemes and absence of where-withal with the people who need housing."

It is also evident how the particular production structure simultaneously eats into the resources available for investment. Most recently, faced with recessionary conditions in a number of industries catering to the requirements of upper class consumption, the government was compelled to sharply reduce income tax rates as well as indirect taxes on these industries. The large and growing subsidies which are having to be extended to exports are the result of the same compulsions. The skewed income distribution and the structure of production which this has engendered thus effectively limit both the savings available for investment as well as the demand for investment.

It is being argued that the economy would be far worse off in terms of unused industrial capacity and retrenchment and lay-off of labour if domestic demand were not stimulated through cuts in direct and indirect taxes and if exports were not stepped up even though at the cost of large



subsidies. But that is precisely the point: unless it can begin at the beginning — with the distribution of income — the scope for manoeuvre available to the government is bound to be extremely limited and the economy can only get deeper into the groove in which it is caught.

## Labour

### Frozen Earnings

ON June 6, 1974, two ordinances were promulgated by the President: The Companies (Temporary Restriction on Dividends) Ordinance, 1974; and The Additional Emoluments (Compulsory Deposit) Ordinance, 1974. Both the measures were intended to be part of the 'drastic measures' that were then being taken by the government to curb inflationary pressures. The deprivation imposed on the working class was sought to be balanced by corresponding restrictions imposed on the private sector. The year was 1974 and the working class was in a position to oppose these moves. Later in August, even as parliament was debating the Bill which was brought before it to replace the Ordinance, there was a massive convention in Delhi, though of course these protests did not in any way affect the passage of the Bill.

This measure to restrict the wages and emoluments of the working class consisted of two parts: one, additional wages and salaries — by way of bonus etc — were to be deposited for one year; and two, 50 per cent of additional dearness allowance, earned either by way of increases in state and Central DA rates, or through upward revisions due to adjustment with the cost of living index, were to be put in a compulsory deposit account for two years. Thus, the frozen wages were to be retained by the government upto June 1975, and half of the frozen DA for a period of two years, ending July 5, 1976. When the time came to release the first instalment of frozen wages in July 1975, there had come about, in the words of the president of the Congress party, 'a qualitative change' in the country. It took some time for the frozen wages to be released, and even when it was done, there were attempts to induce the workers to retain the money in deposit with the government, though by all accounts these were not very successful.

This lack of enthusiasm on the part of the working class to voluntarily vest a part of its wages indefinitely with the government was perhaps at least partly responsible for the government's action

in extending the Additional Emoluments (Compulsory Deposit) Act, 1974, which was due to lapse in July this year, by yet another year. 50 per cent of the additional dearness allowance will thus continue to be diverted into compulsory deposit accounts. The DA impounded upto June this year has got to be returned to the workers "in the manner stipulated by the Act", that is, in five equal annual instalments. The first instalment, reported to amount to about Rs 280 crores, fell due on July 5. More than a month later, it is not clear if all the workers have in fact received their money. Moreover, there has been a concerted attempt by government leaders to once again induce workers to invest in one or other of the savings schemes floated by the government. There has been a chorus of advice to the working class orchestrated from even before the day the first instalment was officially due. The advice is based on familiar arguments: that a principal means of controlling inflation — which is anyway claimed to be well under control — is preventing the flow of excess money into the market; and if a sizeable part of the released wages were to return to circulation, price stability would be upset. The minister of finance and his deputy have been eloquent on the subject of the need for thrift on the part of the working class; so, for that matter, has been the chief minister of Maharashtra who, according to a newspaper report, "called upon the working class to contribute its mite to the saving habit".

These exhortations to the working class to practise thrift have coincided with other economic measures affecting the propertied classes. Prominent among these are the withdrawal of the curbs on dividends and the removal of restrictions on the issue of bonus shares by companies.

## Haldia

### Still-Born?

*A Correspondent writes:*

"BIG ships are unable to negotiate the Hooghly right upto Haldia" — such

was the headline in a Calcutta daily a few months ago. So the end has come almost before the beginning. The port is yet to be completed, but the very purpose of the much-talked of port at the lower Ganga has gone up in the air. It was bound to be so, as the planning for Haldia at its present site was wrong right from beginning.

Primarily, the Calcutta Port Commission, Rendel, Palmer and Triton of London and the Port of London Authority were involved in the Haldia port project. Rendel, Palmer and Triton are advisers to Calcutta Port Authority. The above three organisations made the master plan for Haldia in 1962 and it was placed before the World Bank for approval in 1963, with a request for a grant of Rs 14 crores to start with. The World Bank, satisfied with the preliminary report, recommended a detailed techno-economic survey. The World Bank's interest in Haldia was strengthened by Japan's need for a port on India's east coast which could efficiently handle iron ore exports — vital to Japan's steel complexes in which the World Bank itself had huge investments. Equally, British tea and jute interests too were strongly in favour of Haldia.

It was against this background that the Haldia Survey Commission was created under chairmanship of D G Bhatia, a Director in the Ministry of Transport. Following the Bhatia Report, the World Bank proceeded with its "aid", i.e. investment, which would again be absorbed by overseas firms as India could only supply cheap labour. Even the dredging work has been entrusted to a Yugoslav firm. According to the Bhatia Report, Haldia is the cheapest possible port on the eastern coast for iron ore export, and the World Bank has naturally been satisfied with the choice.

Initially river experts were in favour of Haldia as there are only two sandbars from the mouth of the Hooghly to Haldia. (There are 15 sandbars from the mouth of the Hooghly to Calcutta.) Further, it could be connected

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easily with the mining areas through railway as it is on the western bank. It was also estimated that ships of 80,000 dwt would be able to negotiate upto Haldia.

But it is now realised that even smaller vessels cannot cross the two sandbars as port planning has been wrong. It is not a good site for sea-going vessels. The navigability of the Hooghly has been rapidly going down every year because of another blunder — the DVC, patterned after the Tennessee Valley Authority of the US. The Damodar flood, prior to the DVC project, was powerful enough to wash away the huge silts of lower Hooghly and the silts that come with the high tide every day year after year. The DVC stopped this natural dredging of the Hooghly; and Haldia too will soon reach the stage of Calcutta.

To make Calcutta and Haldia port navigable, Farakka came into existence, but Farakka in turn has created new problems. Farakka will ensure 40,000 cusecs of water to keep the Ganga flow on — this has been the argument in favour of Farakka; but it is doubtful if 40,000 cusecs of water will ever be available at the point of Farakka even at times of high flood. As proposed at present, the Farakka discharge will bring silts of the upper stream upto Barrackpore or Naihati and that would mean floods threatening Calcutta city itself. Meanwhile Haldia will continue to accumulate silt, and the large vessels will use Paradip or Madras.

Like Calcutta port, which is dying, Haldia too will die as the monsoon discharge of the Damodar carried through the Rupnarayan is no longer available, due to the DVC, to clear the staggering silting of the lower Ganga.

## Japan

### Relations with China

THERE seems to have been some not entirely unexpected setback to the process of normalisation of relations between Japan and China. Though diplomatic relations between the two countries were established towards the end of 1972, many of the clauses of joint communique issued at the end of the then Japanese Prime Minister Kakuei Tanaka's visit to Peking in September 1972 are yet to be fully implemented. The most significant of these — Clause 8 of the joint communique — stated:

"To consolidate and develop the peaceful and friendly relations between the two countries, the Government of the People's Republic of China and the Government of Japan agree to hold negotiations aimed at the conclusion of a Treaty of peace and friendship." In April last year, the draft texts of the peace and amity treaty were exchanged; and now, more than a year has passed, and there still does not seem to be any indications that an accepted text of the treaty has been agreed upon, for formal signing and ratification.

This hitch was not unexpected. Almost from the very beginning, the process of normalisation of relations between China and Japan has been viewed with the gravest anxiety and suspicion by the Soviet Union. Clause 7 of the Chou-Tanaka joint communique of September 1972 had stated: "The normalisation of relations between China and Japan is not directed against third countries. Neither of the two countries should seek hegemony in the Asia-Pacific region, and each country is opposed to efforts by any other country or group of countries to establish such hegemony." The Soviet Union seems to have read the latter part of this clause as referring to itself. When the draft texts of the treaty were exchanged in April last year, *Pravda* came out with a warning that if Japan signed a treaty of peace and friendship with China, it would be endangering its own national interests. The Chinese leaders were accused of trying to draw Japan into their "anti-Soviet" game. Later, in June 1975, the Soviet Union once again warned Japan not to conclude a peace treaty with China which would include a reference to "the hegemony in Asia of Third Power". Clearly, the Soviet Union was having in mind the reported differences in the wording of the two proposed drafts; while the Japanese draft is supposed to have simply called for the maintenance of permanent peace between the two countries, the Chinese draft, in keeping with Clause 7 of the Chou-Tanaka communique, was explicit in its opposition to attempts by any country to establish hegemony.

It is difficult to find fault with the reported insistence of China for the inclusion of an anti-hegemony clause in the proposed peace and amity treaty; for such a clause is quite consistent with the Chou-Tanaka joint communi-

que. However, there seems to have developed in Japan a desire to underplay this point. The Soviet Union's warnings to Japan seem to have had their effect, and despite the statement made by Japanese foreign minister Kiichi Miyazawa in August last that Japan had a strong desire to break the deadlock in the negotiation of the peace treaty, the conclusion to the negotiations is nowhere in sight.

The situation has been further complicated by the recent Chinese statements on Soviet-Japanese relations, and China's extension of support to Japan in its territorial dispute with the Soviet Union, especially over the Kuril islands and Sakhalin. The participation, on the invitation of the Soviet Union, of Japanese capitalists in the exploitation of the wealth of Soviet Siberia has been stalled by the failure of the two countries to resolve this dispute. But Japan does not seem to have taken kindly to China's expression of support, since it is also working to achieve an independent accommodation with the Soviet Union.

This deadlock in China-Japan relations in many ways presents an extraordinary situation. All the political parties in Japan, and the overwhelming majority of the Japanese people want Japan to conclude the peace and amity treaty with China; even the Japanese government is in favour of it, and is in fact committed to it. And yet, the Japanese government finds itself hamstrung over the inclusion of a clause opposing hegemony — a political reality of the present-day world which it had itself recognised in the Chou-Tanaka communique of September 1972.

## Farming

### Missed Opportunity

*A Correspondent writes:*

FOR the first time in the last four years, most parts of the drought-prone areas of Maharashtra — particularly parts of Ahmednagar, Sholapur, Pandharpur, Mangalwada, and Barsi — have had timely rains, even though these were less than adequate in some places. Farmers without irrigated lands were thus able, for the first time in four years, to extensively plan for crops such as groundnut, maize, and kharif jowar — in this predominantly rabi jowar area. The state's hybrid



jowar campaign too could have taken advantage of these propitious circumstances. Indeed, as part of the campaign, zilla parishads had planned to advance Rs 200 to Rs 300 per acre, in terms of fertiliser, seed, etc, to needy farmers who were prepared to grow hybrid jowar.

Alas, the campaign seems to have not reached the small farmers. Unlike the big farmers, they could not manage to get sufficient supplies or invest resources on their own for reimbursement later by the zilla parishad. Zilla parishad loans were planned for a hybrid sorghum campaign. However, the planned assistance was not provided in most villages till the second week of July. And, of course, farmers would not risk planting hybrid sorghum at such a late stage. Evidently, unless the hybrid sorghum is planted by June 15, it is severely affected by midge-fly during its flowering and seed formation stage in September, when the region has its second phase of heavy rains.

Most farmers have thus gone in for groundnut sowing in place of hybrid jowar. The groundnut seeds have been mostly supplied by traders, on credit and on the tacit understanding that the produce which has no government restriction on its trading will be sold only to them.

Even without such competition from

a substitute crop, other factors have got the hybrid jowar programme bogged down in most parts of the jowar-growing tracts. Clearly, scientific development of the seed *per se* is not enough. The hybrid jowar crop has suffered from the midge-fly because its maturing stage coincides with the second phase of the bi-model rainfall pattern in the region. The poor performance of HYV jowar, compared with HYV wheat, rice, and bajra (another crop of the dry areas) over the last decade or so is partly the result of this. Various devices have been tried, such as ratooning of the crop (i.e., cutting of the young plants for fresh sprouting during late August) in order to postpone the ear-head and seed formation till after the second phase of rainfall. And farmers may be required to advance sorghum-sowing by a few weeks.

But farmers, for their part, point out that hybrid jowar faces relatively heavy attack of the shoot-fly, and wish that the hybrid jowar programme operator would advance the dates of its execution by a few weeks. The fact is that, where an unstable monsoon is very much part of the parameters in the country, the evolution of farm technology and agricultural strategy has to compensate for this instability by superior planning.

achieving a multiracial society in the British Isles. Dhondy wants us to believe that the Labour government, while legislating against discrimination on the grounds of colour, turns a blind eye to acts of violence against the immigrant population. This is utterly untrue — how then does he explain the fact that within 48 hours of the murder of the two London University students (one of whom was a Bengali boy) recently, four white youths were arrested and charged with the crime? How does he explain that very soon after the fatal stabbing of Gurdip Chaggar in Southall a similar group of youths, but unexpectedly including one West Indian boy, were arrested and have been charged with the crime? While the case of the Ali family is an unhappy one, no one claims that Britain is Utopia, and I maintain that much sincere effort is being made by the government and the general public to assimilate the newcomers into the community.

It is an accepted fact that attitudes cannot be changed by legislation, but legislation is necessary to help the grass-roots efforts that come up against opposition. There exists at the official level the Immigrants Advisory Council, the Race Relations Board and the Community Relations Committee — all financed out of public funds to assist the newly arrived citizens to understand and obtain their 'rights'. At the non-official level, there are social workers, teachers, voluntary workers and just plain people all engaged in helping the immigrants to settle comfortably. Contrary to what Dhondy would like his readers to believe, the British people are determined to achieve harmony but they do not need or heed advice couched in fascist-like terms — "Any State determined to stamp out incitement to racial violence would have arrested and tried Enoch Powell for his public pronouncements about Asians..." — and thus establish him in the role of martyr. They managed to contain Oswald Mosley when he was inciting them to violence against the Jews, and they will contain Enoch Powell too by persuading the indigenous population that he is but an articulate scaremonger, an ambitious but now disappointed and embittered politician who sees that the only recognition he can obtain is from the fringe, the lunatic fringe that exists in every society.

JANE ROY

Delhi,  
July 29.

## LETTER TO EDITOR

### "United against the Blacks?"

IN India on holiday for a few weeks from Britain, I was startled to read in your 17th July issue Farrukh Dhondy's article 'United against the Blacks'. Dhondy paints a picture of an immigrant population in Britain with their backs against the wall, living a life of terror and lynch-mob intimidation. This is so far from the truth that it is difficult to understand what Dhondy thinks he is achieving in this article of half-truths, which must have worried many a relative of Britain's Asian citizens unnecessarily. Dhondy would appear to be vying with Enoch Powell for the title of 'Arch-Exaggerator', and seems to be just as professional in arousing racial disharmony. His article is couched in terms designed to arouse alarm and, like Powell, his utterances can only serve to detract from any efforts that are being made to assimilate the immigrant population

into the British scene. May I tell you how I, as the British wife of an Indian citizen, see the situation? You could then perhaps ask Dhondy to enlarge on his inflammatory and anti-British statements — to tell us how often these incidents that he describes in lurid terms occur and for how long they have been happening.

Sadly, it is true that in Britain there is an element of the population that is anti-black and blindly so. Sadly too, we do have an MP called Enoch Powell who is notorious for his racial outbursts. But, please, Dhondy, keep things in perspective! A small section of the community is utterly prejudiced, and one MP leads them on — this against the vast majority of Britishers who either don't care about the immigrant population one way or the other and are not affected by their presence, or who are working hard towards



## Clippings

Mr F D Kulakov, member of the Politburo and one of the secretaries of the Soviet Communist Party said last night that Indo-Soviet treaty had been and would be a reliable guarantee of peace and security in Asia and throughout the world. ... Mr Kulakov described the treaty as a major step in the consolidation of the diverse ties of co-operation between the two countries. It placed the relations on international legal basis while taking them to a qualitatively new higher state.

*Free Press Journal*, August 11

The US Ambassador to India, Mr William Saxbe, indicated here [Madras] today that American investment in India will increase in the near future. The fact that the US topped the list of India's importers and emerged as the best buyer of its finished goods "has served notice that we are coming back to India strongly", he said.

*The Hindu*, August 11

The latest statistics on industrial growth have further strengthened the official optimism on economic revival this year. According to an assessment made by the ministry of industry on the basis of CSO quick estimates, the rate of industrial growth in the first quarter of the current financial year would be 12 per cent.

*The Economic Times*, August 11

The production at the Bharat Heavy Electricals, the prized public sector undertaking, was down by as much as 28 per cent last month as compared to the corresponding month of the previous year.

*Business Standard*, August 13

The question of extending excise duty relief to the textile industry for higher production is under consideration

*The Economic Times*, August 18

The policy relating to expansion of loomage in the textile industry is likely to be liberalised soon in a bid to augment cloth output.

*The Economic Times*, August 15

The Cotton Corporation of India is understood to have decided to sell about 70,000 bales of foreign cotton at a loss of about Rs three crores.

*Financial Express*, August 16

An outlay of Rs 150 crores a year is being sought towards financial assistance for modernising textile units over a period of three years.

*The Economic Times*, August 17

The next biggest share of Rs 39.18 crores [in the first supplementary demands for grants presented to parliament] is in respect of payment to owners of sick textile mills taken over under the Sick Textile Undertakings (Nationalisation) Act of 1974.

*The Hindu*, August 14

The government of Maharashtra has requested the Centre to extend the 15 per cent subsidy to new industries, now operating in the three backward districts of the state, to ten other districts.

*The Times of India*, August 16

A feature of the supplementary demands is that as much as Rs 123.25 crores out of the total of Rs 132.96 crores are towards non-Plan expenditure. Out of this, the biggest share of Rs 60 crores goes to subsidise the phosphatic fertiliser manufacturers to off-set the price reduction.

*The Hindu*, August 14

The Fertiliser Corporation of India has recorded a 7.5 per cent increase in production of fertiliser over the target for the first quarter from April to June in the current year.

*Financial Express*, August 16

Fertiliser offtake has shown a significant increase of 34 per cent during the current kharif season over last year's level, thanks to the successive reductions in fertiliser prices and intensified sales promotion measures.

*Financial Express*, August 18

A rise in the price of paddy to match the increase in cost of cultivation was urged by representatives of farmers, who met the Agricultural Prices Commission which held its one-day sitting here [Madras] today.

*The Hindu*, August 13

India, considered by the West as a developing country, had accumulated foreign exchange resources which were actually financing the development of developed countries, according to Mr T A Pai, Union minister for industry. The worry in the past, he said here [Bangalore] today, was lack of adequate foreign exchange resources, but the worry now was how to utilise the accumulated resources.

*The Times of India*, August 16

The release of foreign exchange for businessmen and exporters going abroad has been increased by the Reserve Bank on grounds of rise in the cost of living in several countries.

*The Economic Times*, August 16

The finance minister, Mr C Subramaniam, said in the Lok Sabha today that his ministry was prepared to consider further concessions to Indian nationals resident abroad for setting up industries in India.

*Business Standard*, August 14

The Bangalore Development Authority has decided to plan a lay-out in Rajamahal Vilas Second Stage extension to suit the needs of Indian personnel now staying abroad and also those who have already returned.

*Deccan Herald*, August 14

Prime Minister Indira Gandhi told the Indian community in Sri Lanka that the emergency in India had now been considerably relaxed and "it is no longer the same rigid one of the type when it was imposed".

*Indian Express*, August 18

The government considers it "premature to indicate any date for the revocation of the emergency", the home minister Mr Brahmananda Reddy told the Lok Sabha today.

*The Times of India*, August 17

[Union home minister, Mr Brahmananda Reddy] felt that holding elections at this juncture might disturb the delicate situation in the sensitive state

[Nagaland] and unleash forces of strife and discord that would retard the process of normalisation in the state.

*Hindustan Times*, August 18

An Indian industrialist Mr K K Birla, has told British businessmen and bankers of the immense benefits the declaration of emergency has brought to the people of India. "It has created a remarkable transformation in India, generated a sense of national discipline, a feeling of national involvement and accelerated economic growth", he said.

*The Times of India*, August 11

Mr Om Mehta, minister for home affairs, today told the Rajya Sabha that the enforcement directorate was proceeding against members of the Birla family involved in the United Commercial Bank case relating to foreign exchange conversion according to the procedure under the law. ... The minister denied that attempts were being made by the government to hush up the case.

*The Times of India*, August 13

All the inmates of the Paunar ashram, near Wardha, headed by the bhoodan leader, Acharya Vinoba Bhave, began this morning a 36-hour fast to focus attention of the authorities on cow protection.

*The Times of India*, August 12

A group of Sarvodaya workers who had differences with the agitational approach of the group led by Mr Jayaprakash Narayan in the Sarva Seva Sangh has decided to form a new Sarvodaya organisation "to establish Gram Swaraj".

*The Times of India*, August 14

A computer will be installed in Calcutta early next year to help the Calcutta police and the West Bengal police investigate crimes.

*Patriot*, August 16

Crime investigation is to be computerised by the Maharashtra police soon. A computer is expected to be installed at the inspector-general's office in Bombay on Divali day.

*The Times of India*, August 18

A bold step taken for the first time in the country is the appointment [in Andhra Pradesh] of a senior IPS official, Mr M V Narayan Rao, acting inspector general of police, as home secretary.

*The Times of India*, August 17

An allocation of Rs 100 crores has been sought by the home ministry for improving the conditions in jails throughout the country during the next five years.

*Indian Express*, August 12

The Punjab government plans to take Mr Sanjay Gandhi's five-point programme to jails too. According to Mr Yash Paul, Punjab Minister for Jails, the jails department would soon hold family planning camps and organise anti-dowry mass pledges in jails.

*Hindustan Times*, August 14

Only those doctors who perform 50 operations a month at the primary health centres or achieve at least half of their field targets, will be paid the



concerned month's salary, according to the [UP] government's latest orders.

*Hindustan Times*, August 15

Mr Keshav Prasad Gupta, former honorary secretary, Patna Urban Co-operative Bank withdrew a sum of Rs 6.15 lakh from the bank between 8-7-1971 and 23-4-1974 by mortgaging Apsara hotel more than once, according to an FIR lodged with the Kadamkuan police yesterday.

*Indian Nation*, August 14

The jeep, for the purchase of which the local Gandhi Maidan and railway platform were allegedly 'hypothecated' with the Patna Urban Co-operative Bank, was originally purchased in February 1967 by Mr Nawal Kishore Sinha of Kadamkuan. This fact has been revealed in the FIR lodged with

the Kadamkuan police by the liquidator of the bank, Mr Sitaram Gope, Joint Registrar of Co-operative societies

*Indian Nation*, August 14

The curse of poverty caused the death of three children in Ulhasnagar. It is learnt that one Anjanabai Tillumai Mulchandani was fed up with her life due to poverty, as her entire family had remained hungry for the last three days. Her husband has been ailing from T B for a long period. She tied all her three children to the cot and poured kerosene oil and set them on fire. The children were burnt to death. She also attempted suicide but as soon as Shahad police received information, she was saved and now faces a murder charge.

*Free Press Journal*, August 12

## COMPANIES

### Unaffected by Recession

Hansavivek

**TATA ENGINEERING AND LOCOMOTIVE COMPANY** has performed well during 1975-76, with increases in production, sales and profits. Margins have, however, come down owing to rise in costs. The company achieved a record 100 per cent utilisation of installed capacity and rolled out 3,500 more vehicles than in the previous year. It had no difficulty in selling its entire production, though it had to contend with the full effect of various cost increases which had taken place in the previous year. Additionally, during 1975-76, central sales tax went up by 33 per cent and the Indian rupee fluctuated adversely against DM by 8 per cent, affecting the cost of raw materials and capital equipment imported from Germany.

In accordance with the parametric surveillance, introduced by government in October 1974, a return of 16 per cent before interest and taxes on capital employed and 9 per cent after taxes on net worth was allowed on commercial vehicles. All forms of price control on commercial vehicles, including the parametric surveillance, were lifted in January last. In April 1975 the company made a marginal price adjustment of about 2 per cent and since then no increase in prices was effected, with the result that its return on capital employed declined from 13 per cent in 1974-75 to 11.5 per cent in 1975-76. Even this modest return would not have been possible, but for cost reduc-

tions effected over the entire range of operations and economies achieved by better utilisation of direct and indirect materials. TELCO was able to decrease the stock of raw materials, bought-out components and work-in-progress by Rs 13 crores without creating shortages or adversely affecting production.

The company has not only maintained dividend at 15 per cent on increased capital, but also proposed issue of bonus shares in the proportion 1:5. The directors have already recorded their intention to maintain this rate of dividend on the expanded capital after the bonus issue.

The company has made good progress in its expansion programme. The capacity of the Jamshedpur plant was raised on schedule to 27,000 vehicles per annum. The setting up of the automobile plant at Poona is fully under way. The alloy iron foundry there has commenced commercial production. Production of crankshafts, synchro gearboxes and various types of gears has already started and engine production is expected to be established by the end of March next. With the help of the new facilities that are being installed, the company is planning to produce this year even more vehicles and spare parts than in any previous year. Commenting on the prospects, the chairman, S Moolgalkar, says that before long the benefits of the expansion programme should begin to accrue to the company.

**INDIAN HOTEL COMPANY's** results are impressive. Not only are income and profits higher, but margins too have increased. The company has well rewarded its shareholders and employees. Shareholders have been offered a gift of shares on a two-for-five basis, besides a dividend of 20 per cent, part of which is exempt from tax; last year 18 per cent dividend was paid and only 6.4 per cent was paid the year before. Equity distribution is covered nearly 2.6 times by earnings, and the directors have recorded their intention to pay "not less than 18 per cent" on the expanded capital after the proposed bonus issue. The directors have placed on record their appreciation of the co-operation and devotion shown by employees "who feel that the company for which they are working is their own". A fresh agreement with the workers' union was signed in February last, effective for three years. Increased remuneration and additional fringe benefits apart, the agreement includes a novel 'own your house' scheme for employees to enable them to own houses on easy terms within a reasonable period. The company also earned Rs 6.88 crores in foreign exchange, whereas its total expenditure in foreign currency amounted to less than Rs 24 lakhs.

The 75-year-old company has achieved remarkable progress since the completion of the major modernisation and expansion programme in 1972. During this period, its gross income has nearly doubled from Rs 4.35 crores in 1972-73 to Rs 8.61 crores in 1975-76, and profit before tax has increased three-and-a-half times from Rs 40 lakhs to Rs 1.38 crores. Having adjusted the benefit of the relief for exemption of income-tax in respect of new undertakings, the company became liable for tax last year, and made a provision of Rs 33 lakhs for this purpose. Even so, after-tax profit was higher at Rs 1.05 crores against Rs 98 lakhs in 1974-75. These results have been achieved despite considerable increase in cost of wages. Inventories and borrowings have been scaled down.

Almost the entire profits of the company have upto now come from the combined operations of the 'Taj Mahal' and 'Taj Intercontinental' hotels in Bombay, which have reached maximum utilisation of their rooms, restaurants and other facilities. Any significant increase in the company's profit now will have to come from other sources of income, such as the flight kitchen at Santa Cruz, other hotels in the Taj



group, and entirely new projects. Revenues from the hotels outside Bombay under the company's operation have been minimal upto now, but they may be expected to rise gradually, as domestic and foreign tourist and business travel continues to grow. The company has finalised arrangements to establish a first-class international hotel in New Delhi in association with New Delhi Municipal Committee. The building and all its fixed equipment will be constructed and owned by NMDC and leased to the company, while all the furniture, furnishings and moveable assets will be provided and owned by the latter. The construction of the hotel on a good site on Mansingh Road, near India Gate, is expected to start soon and commercial operation should begin by the end of 1978. This project would greatly strengthen the earning power of the whole group.

J R D Tata, chairman, has underlined the need for more hotel rooms to cater to the tourist traffic in the country. He says that at present there are only about 15,000 hotel rooms in about 240 hotels throughout the country suitable for tourists. This is only half the number required even today, let alone

the number that will be required within the next 10 years. The addition of an extra 15,000 rooms would at today's prices cost between Rs 150 crores and Rs 200 crores, depending on the category of hotel. As against this, Rs 78 crores were provided for tourist promotion during the fifth plan of which only Rs 17 crores was for loans by the financial institutions to the private sector. Tata has reiterated his plea that the hotel industry be recognised as a major export industry and the same degree of assistance and incentives granted to other export industries be extended to it.

**METAL BOX COMPANY OF INDIA'S** 1975-76 results are the most disastrous in its 43-year career, with the first-ever loss and no dividend for preference or equity shareholders. The main reason for this is the sharp fall in demand for the products, aggravated by an 86-day lockout at the establishments in Calcutta. The loss entailed a severe strain on liquidity, resulting in an increased interest burden. The company had also to make non-recurring payments of Rs 1.58 crores to employees who left under the 'voluntary separation scheme' in

April 1975. On net sales, 22 per cent lower than the previous year's, there was a trading loss of Rs 3.05 crores — as against a profit of Rs 4.08 crores in the previous year. After depreciation, the loss increased to Rs 4.02 crores. Even after utilising Rs 10,50,000 written back from the development rebate reserve, Rs 1,44,000 of profit on disposal of fixed assets, Rs 1.91 crores lying in general reserve, and surplus of Rs 17,000 brought forward from the previous year, there was yet a balance loss of Rs 1.93 crores to be carried forward. The chairman Bhaskar Mitter points out that the fall in demand started in mid-1974 and continued through last year. Decline in demand apart, there was a very sharp shift away from unit consumer packs to loose purchases at retail level. Thus, while overall production of vanaspati increased by more than 20 per cent, its sales in consumer packs dropped by nearly 35 per cent. This was also true of edible oils and many other important products. At the same time, costs kept rising. Indigenous tinplate, the major raw material, had seven price increases from July 1974, amounting to about 30 per cent increase. During 1975-76, power rates

### The Week's Companies

[Rs in Lakhs]

	Telco		Indian Hotels		Metal Box		Mafatlal Fine	
	Latest Year 31-3-76	Last Year 31-3-75	Latest Year 31-3-76	Last Year 31-3-75	Latest Year 31-12-75	Last Year 31-12-74	Latest Year 31-3-76	Last Year 31-3-75
Paid-up capital	2013	1949	235	235	694	694	434	434
Reserves	3691	2827	221	194	48	449	861	816
Borrowings	9399	9196	421	455	1348	1140	1316	1246
of which Term borrowings	3028	2908	219	225	382	366	414	442
Gross fixed assets	18642	15838	1182	1099	1736	1637	2422	2337
Net fixed assets	8017	6245	842	809	1045	1030	947	1006
Investments	42	42	20	20	8	8	42	39
Current liabilities	5020	5162	239	124	1283	1368	1006	867
Current assets	12064	12847	249	172	2320	2612	2570	2314
Stocks	8682	9628	14	23	1184	1481	1342	1390
Book debts	3329	3192	220	124	1004	1016	1203	890
Net sales	24542	20657	854	723	3863	4961	5171	4362
Other income	264	316	7	3	35	38	110	67
Raw material costs	13858	11846	172	167	2601	2780	2283	2057
Wages	3335	3019	160	129	969	1161	924	905
Interest	1249	998	49	52	209	170	143	141
Gross profit (+)/loss(—)	1909	1811	188	147	—305	408	410	306
Depreciation provision	1054	1134	50	49	97	88	144	149
Tax provision	91	136	33	—	—	200	161	84
Net profit (+)/loss(—)	764	541	105	98	—402	120	105	73
Development rebate provision	26	265	7	1	—	9	2	19
Transfer to reserves	463	10	57	60	—	17	32	—
Dividend								
Amount	P 39 E 236	39 227	P 5 E 36	5 32	P — E —	1 93	P 2 E 69	2 61
Rate (per cent)	P 9 E 15	9 15	P 9.3 E 20	9.3 18	P — E —	6 14	P 6.43 E 17	6.43 13
Cover (times)	2.96	1.04	2.58	2.90	—	1.18	1.46	0.85
Ratios (per cent)								
Gross profit/sales	7.78	8.76	22.01	20.33	—	8.22	7.92	7.01
Net profit/capital employed	5.05	3.87	11.74	11.09	—	5.25	4.02	2.92
Inventories/sales	35.38	46.61	1.64	3.17	30.73	29.85	25.92	31.87
Wages/sales	13.59	14.61	18.76	17.15	25.08	23.60	17.87	20.75



went up between 20 per cent and 57 per cent at different locations, financing costs rose by 23 per cent, and dearness allowance looked up by 6 per cent. The industry resorted to distress selling, and prices of many packages suffered drops which were uneconomic in some cases. Commenting on the prospects, the chairman says that there has been mild revival of demand in the current year which however is "not much above the break-even levels" though results in comparison with the same period of the previous year are "greatly encouraging". No more cash losses are being incurred and both commercial and financial strains are diminishing. Meanwhile, the proposal for manufacture of bearings is still under discussion with government, financial institutions, and technical collaborators. A clearer picture is likely to emerge this year. The project of the glass bottle company in Bangalore is going well and is expected to go on stream by the end of 1977. The letterpress printing machinery project in Kanpur, which was to be set up in the joint sector, has been abandoned, as a detailed review showed that it was no longer attractive. The offset printing machinery proposal has received support from the West Bengal government and final approval is expected shortly.

**MAFATLAL FINE SPINNING AND MANUFACTURING** achieved higher sales and profits during 1975-76 even though it was a year of disturbing trends for the textile industry in general. Many units had to contend with fall in production, mounting stocks of unsold cloth and yarn due to consumer resistance, erratic power supply and cuts and load sheddings, stringent credit curbs, losses on production of controlled cloth, and escalation in costs of inputs. In the face of all these odds, the company's textile division performed well owing to the widened range of its product-mix and the wide variety of quality fabrics. The chemicals division also increased its contribution to the company's earnings following enhanced demand for its main products, cryolite and aluminium fluoride, from the aluminium industry. Sales of these products expanded from 4,954 tonnes to 8,116 tonnes. Sales of fluorocarbon gases also improved marginally, although the air-conditioning and refrigeration industries have been going through difficult conditions. The company has received an industrial licence to increase the capacity of hydrofluoric

acid and the combined capacity of synthetic cryolite and aluminium fluoride from 5,000 to 6,000 tonnes and from 5,250 to 6,500 tonnes per annum, respectively. Meanwhile, the research and development laboratory of the division has put up a pilot plant for manufacture of aluminium fluoride through a fluidised bed process, which would assist in increasing the manufacturing capacity of this item at a lower cost. After trial production is stabilised in this plant, the company would seek establishment of the manufacturing capacity on a continuous basis. The company spent last year Rs 103 lakhs on additions and replacements of plant, machinery and buildings in the textile division and Rs 39 lakhs in the chemicals division. Commenting on the current year's working, the directors point out that the outlook for the textile industry has been obscured by the upsurge in prices of cotton and rise in water rates and other cost components coupled with the continuation of the controlled cloth scheme and the demand deflation in textile products. They however hope that the good monsoon might aid the economic climate and give impetus to revival of demand for textile products.

**GABRIEL INDIA**, a leading manufacturer of shock absorbers, has made good progress in its diversification project for production of thin-walled bimetal bearings in collaboration with Federal Mogul of USA. The company has been sanctioned a capacity of six million bearings and 800 tonnes of bimetal strips per annum on the basis of maximum capacity utilisation. Government has also stipulated that 25 per cent of the production of bimetal strips should be supplied to other manufacturers of bimetal bearings, who do not have facilities for the manufacture of such strips. The project is located at Parwanoo in Himachal Pradesh, which is a 'backward' area and will entitle the company to central subsidy, concessional finance and tax benefits. The project cost, estimated at Rs 5 crores including the foreign exchange component of Rs 1.75 crores, is proposed to be financed by a foreign exchange loan from ICICI, term loans from banks and financial institutions and by raising the paid-up capital from Rs 57 lakhs to Rs 2 crores. The foreign equity holding in the company will get reduced from 50 per cent to 40 per cent to conform to the FERA regulations. The company

expects to commence commercial production by early 1978. According to V R Sinha, vice president, the project among has certain exclusive features. Notable among these are that the company has taken up the project from the raw-material stage, including manufacture of copper lead alloy powder, which existing manufacturers have to import at present, and it is also taking up manufacture of flanged bearings, which too are now imported. The company, moreover, is obtaining the latest technology of the sintered process for manufacture of the bimetallic strip.

**HINDUSTAN ALUMINIUM** increased production in 1975 from 44,002 tonnes to 62,427 tonnes, but could not utilise the full installed capacity of 95,000 tonnes due to restrictions and cuts in power supply. At present, the plant is running at a capacity of about 84,000 tonnes. The captive Renusagar power plant has been overhauled and the company expects to put into operation the full installed capacity during the next few months. With a view to taking advantage of the scheme for excise rebate on increased production over a pre-fixed level, the company is examining the possibility of expansion of the plant by installing an additional 25,000 tonnes of production capacity and a complete alumina plant of 70,000 tonnes per annum. The management also intends to expand fabrication facilities and develop new alloys to meet the current demand. This expansion is estimated to take 3 to 4 years to be put into operation. At the company's annual meeting, A V Birla told shareholders that he expected the second half of the current year to give better results which should enable the company to at least clear all arrears of preference dividend from the current year's profits.

**STORMAC INDIA** is entering the capital market on August 30 with a public issue of 2,45,000 equity shares of Rs 10 each to raise a part of the finance required for its Rs 101-lakh project, being set up at Vatva near Ahmedabad for annual manufacture of eight rotary screen printing machines in technical and financial collaboration with Stork Brabant of Holland. The public issue, which is fully underwritten, is managed by SBI's merchant banking division. The plant and equipment required by the company is available indigenously. The management expects the company to commence commercial production by July next year.



NEW DELHI

## Miles to Go

B M

THE potential of Bombay High, after the long-delayed drilling of the structure was started, is turning out to be better than even the most optimistic pre-drilling estimates. The strikes at Bassein and other faults have given it added dimensions. But far more than even the precious oil struck, the success here has helped to restore morale and confidence among our oil men. Morale and confidence had been greatly undermined by the earlier smug dependence on import of cheap oil for a whole decade until the world oil crisis jolted the government out of a mood of complacency and lethargy in regard to oil exploration. Paucity of funds, bad leadership in the ONGC, the overlordship of the bureaucracy and the tie-up with a single source of technology, not necessarily the best, had emasculated the ONGC and its work had been sapped of energy, enthusiasm, imagination and initiative for a long time. The situation has greatly improved during the last couple of years in this key sector of the national economy.

The national oil industry is now poised for a big advance on a wide front. What is needed is a good and firm back-up for the industry, organisationally and financially. Some positive and sensible steps have been taken in the last two years to intensify exploration and production and to increase refining capacity. With the take-over of the Burmah-Shell refining and marketing company and the earlier passing of majority shareholding to the government in the former ESSO oil company, almost the entire oil industry in the country has come into the public sector. Caltex and Oil India as well as Assam Oil Company are also proposed to be shortly taken over. This will make for better co-ordination and rationalisation and will result in higher efficiency. The government is presently engaged in an examination of the problems connected with the reorganisation and rationalisation of the industry. It will take some time before a final decision is taken in this regard.

Oil exploration and production will, however, still remain the most critical aspect of any design for the growth

of the oil industry. The leeway to be made up here is large and it will require painstaking effort over a long period to achieve the goal of self-sufficiency about which the Petroleum Minister, K D Malaviya, so often speaks. We are still dependent on crude imports to the extent of two-thirds of our current consumption. If the decision to curb the growth of consumption is strictly followed — which is not always the case — it will still take extraordinary effort and a lot of luck to bridge the gap between consumption and indigenous crude in the next ten years.

Oil exploration is a highly risky and costly venture. It should not be presumed either that in the exploration of other prospective on-shore and off-shore structures, we will be as lucky as we have been at Bombay High. Off-shore oil is admittedly more costly both as regards exploration and production. But in the case of on-shore oil also it is clear enough that scratching the surface will not do. The experience of exploration in the last 10 years when there have been no really significant discoveries shows that drilling will have to be much deeper and deployment of technology and equipment will have to be much more sophisticated.

Malaviya has hinted at a distinct shift in emphasis from off-shore to on-shore exploration. The euphoria over off-shore prospects after the success at the Bombay High has apparently given way to a more realistic and integrated approach. This is a welcome development. Also welcome is the realisation of the urgent need for diversifying the sources of technology for exploration. This is in contrast to the stultifying dependence on the Soviet Union which has characterised the approach of the ONGC in on-shore exploration during the last 20 years.

A wrong notion prevailed till very recently that there was no harm in letting oil remain safe under the earth or the sea-bed while awaiting ideal arrangements for its exploration to emerge. This had resulted in dithering over the drilling of the Bombay High structure. But the pernicious effect of this notion has been even more noticeable

in on-shore exploration. A number of prospects have been drilled in the past many years and abandoned when drilling with outdated technology came up against difficulties and obstructions which the ONGC was not able to cope with. The technology and equipment with the ONGC are able to probe hardly to a depth of 3,000 metres. The ONGC is also incapable of handling high pressures and other problems connected with drilling complicated structures. The world oil crisis has helped to expose the sterile idea that India can afford to leave its oil reserves untapped and that ONGC need not try to acquire new technology in a hurry from diversified sources and should remain content with the established arrangements with its Soviet collaborators. Many factors must have gone into the taking of such a passive stance, but the availability of cheap oil from abroad and the reluctance to spend free foreign exchange played a decisive part.

This approach was significantly changed two years ago when off-shore

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oil was first opened up to Western oil companies and interests for exploration on a profit-sharing basis. It has now been announced that foreign contractors would be invited to help in the exploration of on-shore areas also, more or less on a similar basis as in the case of off-shore exploration. This would appear to be a sensible move in view of the urgent need to intensify exploration which cannot be done unless new technology and equipment are introduced from sources which have them. Considering the fact that collaboration deals are permitted in all manner of projects with a far lower order of priority than oil exploration, no serious policy objection can be raised against the arrangements in view.

#### NEED FOR BOLD INVESTMENT PLAN

The terms on which foreign companies are proposed to be engaged will obviously be subject to private negotiations with them and will be known only when specific deals are struck. While agreeing with the general approach, however, it is necessary also to observe a measure of caution. The anxiety to achieve quick results need not result in diluting the central position of the ONGC in oil exploration and production. Unlike off-shore exploration where the technological gap is wide and critical, the ONGC is much better placed and better equipped to assume larger responsibilities in on-shore exploration with only marginal foreign assistance, such as required for purchase of modern tools and equipment from abroad and hiring the services of competent foreign consultants for interpretation of data.

What is needed, in fact, is that together with an imaginative bid to diversify and update the sources of technology and equipment supply for ONGC, there should be a bold investment plan for exploration with adequate outlays in rupees as well as foreign exchange. At the present level of demand and prices, far bigger investment risks in oil exploration have become worthwhile than may have been prudent in the vanished era of cheap oil. It is also possible to acquire more sophisticated technology and equipment by outright purchase if only adequate foreign exchange resources are committed for the purpose. Here there is still some dithering in official circles. The Finance Ministry is still bothered by anxieties about aid and foreign exchange availability and has not got over the habit of preferring collaboration arrangements to outright purchase

of know-how, technical services and equipment by allocating the necessary foreign exchange resources. The Finance Ministry and in particular the band of officials who have come to acquire the reputation of aid diplomats, in fact, sometimes feel embarrassed when it is pointed out to them that with the present improved foreign exchange reserves position and improved current trade balance, allocations of free foreign exchange for high priority needs such as oil exploration should not be treated in the old tight-fisted manner. They seem to think that any such change in the rules and conventions governing foreign exchange budgeting would be not only premature but even harmful if it came to the attention of the foreign aid-givers. The fear is that anything on these lines may weaken the case for more aid from them. In the circumstances, it is indeed necessary for the political leadership to intervene strongly and set matters right in regard to foreign exchange budgeting.

The demands on rupee resources for intensifying the programme of oil exploration will also be massive. Here again there are many constraints. The ONGC has already presented its demand for an increase in the allocations under the current year's plan and the next two annual plans by about Rs 80 crores. It wants the provision for oil exploration, to be increased from Rs 350 crores to Rs 430 crores as part of the current exercise in updating the Fifth Plan. The increase is entirely for the purpose of stepping up exploration activity on-

shore. Even this increase may not turn out to be adequate if technological arrangements for exploration can be quickly made and the organisation is fully geared up for the job.

#### CRUDE OIL PRICES

Here another major policy issue is involved which again will require the intervention of the political leadership to resolve. Crude oil produced within the country is priced much lower than the price at which it is currently imported. It may be argued that any increase in the price of indigenous crude is in the nature of a book-keeping exercise; also that the cost of production of crude within the country has not very much increased simply because its international price has been marked up by the oil exporting countries. However, there are two fallacies in this line of reasoning. Any increase in crude production is likely to be at a higher cost than the cost estimates which have gone into the past pricing of Indian crude. Secondly, the scale of investment required for oil exploration needs to be taken into account. The ONGC, if it is to discharge its responsibility on a sound basis should be able to generate internal surpluses from the valuable commodity it produces for the national economy rather than depend on budgetary support. The ONGC has already posed the demand for a more reasonable price for its crude, though the higher price it has asked for is still far less than what we pay for imported crude. The ONGC's case for a price revision is a very strong one.

#### WEST BENGAL

### Story of a Sharecropper

Kalyan Chaudhuri

GOPAL MOLLA is one of thousands of sharecroppers in West Bengal who refrain from getting their names registered in the record-of-rights because of the ever-present threat of eviction and physical assault held out by the landlords. Gopal is a poor peasant living in Arjunpur village in Magrahat, South 24-Parganas. He has a small plot of land which produces not more than 200 kg of paddy per year. He has a wife, nine children, a daughter-in-law and a grandson. The produce of his own land is not enough to sustain the family throughout the year. Gopal, therefore, cultivates land belong-

ing to others. He also used to sell potatoes, onions and other vegetables in the local market.

Gopal's case came to the notice of the Directorate of Land Records and Surveys, government of West Bengal, recently in the course of a survey of the socio-economic condition of bargadars in the rural areas of 24-Parganas conducted by a team of officials. Asok Mohan Chakravarty, one of eleven Assistant Magistrates undergoing survey and settlement training along with 47 officers of the IPS, WBCS and WBPS, was the first to come in contact with Gopal, who was at that time living as



August 21, 1976

an outcast in his village.

Gopal's village is just 35 miles from Calcutta. It is well connected by rail and road. It takes less than an hour and a half by bus to reach Calcutta from Magrahat. The situation prevailing in a place so close to Calcutta may be taken as an indicator of the state of affairs in the remote rural areas of West Bengal.

In the village where Gopal lives most of the fertile land was once in the possession of Taleb Ali Molla. After the death of Taleb Ali his land was divided into a number of holdings and was in the separate possession of Taleb Ali's children and sons-in-law. As none of the relatives of Taleb Ali resides in the village, the land owned by them is cultivated by sharecroppers. All inputs are provided by the bargadars and the produce is shared in the ratio 50:50. None of the bargadars is recorded and all of them can be evicted at any time by the landlords.

Gopal Molla used to cultivate, as a sharecropper, more than two acres of land (in different *dags*) belonging to Abdul Hakem Molla and Abdul Hannan Molla, both relatives of the late Taleb Ali. Sometime in late 1974 a young Kanungo of Magrahat Halka Camp came to know that Gopal Molla was a genuine sharecropper and at his own initiative he arranged for Gopal to get his name recorded on the record-of-rights. In the evening of the very day Gopal's name was recorded, some villagers came to Gopal's house and told him that "he had dug his own grave by recording his name as a bargadar".

Two or three days later Gopal's landlords accompanied by the local goondas caught hold of Gopal and beat him up. According to Asok Mohan Chakravarty, whose case study of Gopal Molla has been published in the form of a booklet by the Directorate of Land Records and Surveys, government of West Bengal, "Gopal was threatened with dire consequences by his landlords unless he agreed to withdraw his name from the record-of-rights. It was made clear to Gopal that if he did not comply with the wish of his landlords it would be impossible for him to reside in the village".

Gopal was scared. The next day when he went to the field for harvesting he found the owners of the land and a few of their guardsmen, and they forcibly prevented him from lifting the paddy. After being driven out of his land, Gopal went to the Kanungo and

narrated the whole incident to him. The Kanungo advised him to lodge a complaint with the police. Gopal was afraid to go to the police as he had been warned by the villagers that the police would not protect him from the wrath of the influential landlords. So the next day early in the morning he went to the house of his landlords. He touched their feet and told them in tears that he would do whatever his masters asked him to do.

The landlords took him to the Sub-Registry Office, Magrahat, and asked him to write a registered deed of surrender of his right as a bargadar, and declare that the lands had always been under the personal cultivation of the owners. As required by the rules, when the Sub-Registrar asked him if he was making the deed voluntarily he could not but said "yes" as the landlords were present right there. Gopal had to bear the entire cost of registration (about Rs 35).

But there was more to follow. There is a masjid in Arjunpur. In December last year about two maunds of paddy stored in the masjid were stolen and one Ibrahim was arrested in connection with the theft. Though Gopal had

no connection with the theft case, his landlords managed to falsely implicate him and his son-in-law, Ansar Ali, and got them arrested. They were beaten up brutally with bamboos and sticks in the presence of the people of the village. Later the landlords and their guardsmen ransacked Gopal's house and forcibly took away the paddy he had stored up.

And so Gopal is now living like an outcast in the village. Gopal burst into tears before the survey officer and prayed for justice and redressal of the injustice done to him. Of course, there was nothing the survey officer could do.

Gopal's is not an isolated case. "Bargadars of Salihan in West Bengal" and "Indra Lohar and the Due Process of Law" by D Bandopadhyay and "An Unequal Fight" and "At the Altar of Justice" by Bikram Sarkar, Director of Land Records and Surveys, West Bengal, bring out how most of the protection offered to bargadars under the WBLR Act, 1955, as amended in 1970, has so far "remained merely on paper". In some cases they have even "indirectly added to the misery of bargadars".

## GOA

### Enter, the Congress

RECENT events in the Union Territory of Goa have been of some political significance. First, the seven-member dominant faction of the United Goans Party (UGP — Naik group) in the 30-member Goa Assembly dissolved itself to merge with the Congress. The Congress, with only one member in the assembly (from Daman and not from Goa proper) had till now not been able to widen its political support base on its own; as a result of the dissolution of the UGP faction, the Congress now has seven members from Goa proper.

This political development has, however, not immediately affected the stability of the government of the Maharashtrawadi Gomantak Party (MGP) which has a strength of 19 in the assembly. Nor has it wiped out the original platform of the United Goans Party from Goa's politics. The two-member UGP faction led by Jack Sequeira (UGP — Sequeira group) will continue to function as the United Goans Party in the Union Territory. What the dissolution of the numerically dominant UGP faction (Naik group) has done is that it will give the

Congress a status as an officially recognised opposition party in the assembly for the first time since the liberation of the territory in 1961. This is no small political gain for the Congress; for, after the assembly election in 1963 and with the emergence of the MGP and UGP as the two leading parties — the former declaring itself in favour of merging the territory with Maharashtra and the latter opposing such a move — the Congress party had been virtually eliminated from Goan politics. Following the broad divisions of Goa's population, the MGP emerged as the party representing the interests of the non-brahmin Hindus and the UGP as the party representing the interests of Christians and upper caste Hindu landholders.

Ever since the first assembly elections, the MGP has been the ruling party in Goa, first headed by Dayanand Bandodkar and after his death by his daughter, Shashikala Kakodkar. All the efforts of the Congress to bring the MGP under its fold, during Bandodkar's time and more recently too, did not succeed. The UGP and the



Congress also did not come together for one reason or another although the latter did woo the UGP leadership, particularly Jack Sequeira. But with the majority of the population being Hindus and supporting the MGP a section of the UGP members began to feel that since they would not be welcome in the MGP they had no alternative but to break with the UGP leader, Sequeira. Despite being elected to the assembly on the UGP ticket, the dominant Naik faction had not been able to strike any roots among the Christians. The defeat of the UGP nominee in the assembly by-election proved to be the last straw. Sequeira's decision to "bless" his son Erasmus Sequeira — elected to the Lok Sabha on the UGP ticket — in joining the BLD came as a handy excuse to the group led by Naik to form a separate faction. The UGP split, with Naik leading six MLAs and Sequeira one, occurred in 1974; the seven-member UGP faction led by Naik won "official" recognition, and straightaway started hobnobbing with Congress leaders like Purshottam Kakodkar. These overtures of the Naik faction pleased the Congress leadership, particularly Purshottam Kakodkar, who wanted to get a foothold in the assembly. The recent visit of V B Raju, Rajya Sabha member and General Secretary of the AICC, clinched the merger of UGP-Naik faction with the Congress.

It may be noted that very recently there were signs that a section of even the MGP might join the Congress. Shashikala Kakodkar does not enjoy the charisma and the deep roots that her father had among the masses, not only among Hindus but also Christians. Shashikala Kakodkar had also offended her colleagues in the government and in the MGP on a number of occasions. This had caused disaffection in a section of the MGP in the assembly. If the UGP faction had not merged with the Congress, there was a possibility of a section of the MGP doing so. This would have caused a split in the MGP. Evidently, the UGP-Naik faction stole a march over the disaffected MGP group. But whether the dissident MGP group will still join the Congress is to be seen.

As against this, it is also to be seen whether Naik and his six followers will make any dent either in the stronghold of the MGP or the UGP faction led by Jack Sequeira. Jack Sequeira, who is lying low at present, is apparently hoping to revive the UGP on Catholic sentiments, his party's opposition to land reforms, and the demand

for separate statehood for Goa. As against this, the Congress party is a house divided against itself. Many Congress leaders like G A Kamat, Madhav Bhair and others do not see eye to eye with Purshottam Kakodkar.

What steps Shashikala Kakodkar will take to safeguard the MGP and also satisfy disaffected partymen will be

## ASSAM

# The Agony of Cachar

Nazrul Hq Mazarbhuiyan

CACHAR, a district of Assam, bordering Bangladesh, Manipur and Mizoram, is surrounded by hills in the north, east and south. The river Barak, which originates in the Naga Hills, is its main river; Sonai, Madhura, Jatinga, Katakhal, Dholeswari, Singla and Longai are its tributaries, and these bring fresh waters of love and friendship from the neighbouring hill states to the people of Cachar valley. The district has an area of 6,962 sq kms and according to the 1971 Census a population of 1,713,318. It is isolated from the other districts of Assam and is linked with the rest of the state only by a single-track metre gauge line of NF Railway in the hill section and the newly constructed Silchar-Gauhati road. The economy of the district is agro-based, and rice, tea and sugarcane are its major agricultural products.

There have been heavy floods before in Cachar; one can think of the floods in 1912, 1929, 1946, 1960 and 1966. But even those were not as devastating as the most recent ones. During the earlier floods, the flood waters receded within a week or so but in the recent one, for the first time in the history of Cachar, the flood waters remained for more than 50 days submerging about 85 per cent of the land. According to the estimates of the state government, property worth about Rs 150 crores has been lost. 61 people are known to have lost their lives. The severity of the flood and its devastation has undoubtedly been aggravated by the unscientific, and quite often feeble embankments on the rivers which collapsed in hundreds of places, but some of which still survive only to stand in the way of the receding flood waters. This has been undoubtedly a 'man-made' flood rather than a 'natural calamity'. Any serious investigation would surely bring more things to light and will

watched with interest in view of these recent political developments. She has now announced her decision to fight the forthcoming municipal elections on the MGP symbol. But the two main issues — the role of the Congress party in Goa, and the issue of full statehood or, alternatively, merger with Maharashtra — are yet to be resolved.

unravel the mystery of embankment constructions.

The normal annual rainfall of Cachar is 300-400 cms. There had been a heavy rainfall in the month of June and July in the catchment areas of Barak and its tributaries. On June 7 all the rivers of the district crossed the danger mark. On June 11 the situation went beyond control, and houses, trees and bushes, men and wild elephants and other animals, and even small hillocks were washed away. The feeble embankments could not stand even the first wave of floods. The people could do nothing but climb the roofs of the houses or the tops of the nearby hills and wait to be rescued. The ill-equipped rescue party could not reach some places for a week or more and the victims were starving for weeks. In many cases, the rescue boats shown to be with the panchayat bodies in the records had no existence at all; and those which existed could not be rowed out. There were also many instances of public boats being exclusively used by the panchayat members for their own interest. Many of the boats were used for amusement and sporting purpose. This correspondent who was a member of a voluntary rescue and relief party came across a number of such cases.

There was another major factor, creating maximum harassment and suffering to the affected people. The relief commodities were distributed through the panchayat bodies and it is an undeniable fact that there was no

When corresponding with the Circulation Department, subscribers are requested to mention their subscription numbers.



proper distribution among the real sufferers. There were many cases of malpractices committed by the members of the panchayat. At the same time, anti-social forces took advantage of the flood and looted the property of the people. Many such occurrences were reported in the local papers. According to newspaper reports, the parents taking shelter in the temporary camps, dykes and hillocks along with their children had had to spend the nights without sleep, guarding their young daughters against these goonda elements.

The first flow of the floods receded on June 19, but on June 28 the rivers were once again in spate. On July 1, Cachar was cut off from the rest of the country. It was weeks before correspondents from outside could report on the misery of the people.

The flood has recently receded, but the economy of the district has been shattered. Famine and diseases have followed the flood. The people have no purchasing capacity and are not in

a position to buy food and the essential commodities even at controlled prices. The babies and children are among the worst sufferers. Even the cattle which survived are dying for want of fodder. The government supplied nominal quantities of fodder, but these have not been distributed properly. The self-styled leaders and semi-leaders are trying to satisfy their own needs and some of them are utilising the relief goods to create for themselves a base for the next elections, and the actual sufferers are being neglected. The government has not yet started the much demanded test relief works. The state government's resources are not adequate, and though the Centre has extended some help, much more needs to be done. If the Chinese could successfully control the flood of Hwang Ho, the river of their sorrow for ages, one wonders why we cannot control even a small river like Barak. Surely, there is a lesson somewhere.

branch, the remodelling of Butana and Sunder sub-branch and the new regulator at Dadupur — are expected to be completed. Besides, there is the Nagal Lift Irrigation Scheme to provide irrigation to the high areas in Ambala district, between Chaggar and Tangri, on which work was begun in 1975-76.

On present calculations, the area irrigated by the end of the Fifth Plan (when all these projects are expected to be completed) would rise to 45 lakh acres. This should make the arid areas in the state's south-west prosperous and free of recurring famine every other year. This should also help remove the distressing regional imbalances, where the northern districts flourish with bumper crops almost every year and the drought-prone southern areas face near-famine conditions every now and then. The project will help irrigate nearly 50 per cent of the 15 lakh dry acres spread over 744 villages inhabited by about 8 per cent of the population, and agricultural production in the entire state would thus be stabilised.

## NORTH

### New Hope in Irrigation

CONSTRUCTION work on the link channels has begun this month on Haryana's Rs 65-crore prestigious Jawaharlal Nehru Canal complex. This is perhaps the biggest lift-irrigation scheme in Asia. The project will reach water to at least four districts in Haryana, particularly Rohtak, Gurgaon and Mohindergarh.

The long-awaited award by the Centre on the sharing of the Ravi-Beas-Sutlej waters was announced on March 25. Recognising Haryana's greater needs and the absence of any perennial river within the state, the Centre allotted 3.5 million acre feet (MAF) of water to Haryana and an equal share to Punjab. Punjab had insisted all these years that a much larger allocation was due to it on the basis of the rivers' course within its boundaries.

On April 3, the Haryana Chief Minister announced the state government's intention to complete the 106-km carriage canal in order to bring to the state its share of the water within the next two years. The government had initially earmarked for the scheme Rs 1 crore in its current year's budget and had intended to substantially enhance the outlay later so as to expedite the work. On July 5, the first day of the state assembly's monsoon

session, the Chief Minister disclosed that Haryana's share had been increased by 0.23 million acre feet on the basis of a recent survey conducted by the Central Irrigation and Power Department. The Punjab government, which is to construct the remaining 103-km portion of the channel, has promised full co-operation.

The entire project is to be completed by 1980. By present calculations, there would be enough water to make this canal perennial. Perennial canals have been non-existent in Haryana until now. In fact, for many years, canals without water caused much frustration to people in the state whose hopes had been roused by a series of major and medium irrigation projects for which the Fifth Plan outlay had been fixed at Rs 99.26 crores — Rs 45.26 crores more than the expenditure incurred on such schemes during the Fourth Plan. During the current quinquennium, the other major and medium irrigation schemes — the Gurgaon Canal Project, the Western Jamuna Canal Project, the Indira Gandhi Irrigation Scheme, the Birendra Narain Chakravarty Lift Irrigation Scheme, the work of raising the Bibipur Lake capacity, the lining of the Delhi branch, and the Delhi Tail Distributary, the Munka Canal Regulator, the lining of the Hansi

Under the Indus Waters Treaty signed about 17 years ago, India had to pay Pakistan Rs 110 crores to finance its construction of alternative canals in Pakistani territory. In 1970 Pakistan lost all claims to the Ravi-Beas-Sutlej waters. Since then these waters have been nevertheless continuing to flow into Pakistan, and the free flow would stop only when the Sutlej-Beas Link is completed in July 1977. Some of these waters, the Haryana Chief Minister said recently, could be brought to the state through the main Bhakra Canal by running it to full capacity. The stakes are indeed high not only for Haryana but for the entire country. These waters would help irrigate about 5.6 lakh acres during kharif and 8.40 lakh acres during rabi. The additional production would exceed Rs 107 crores in Haryana alone — about 7.5 lakh tonnes of additional foodgrains, 1.47 lakh tonnes of oilseeds, and 21 lakh tonnes of sugarcane.

#### A Correction

In the article "Family Size, Consumption Expenditure, Income and Land Holding in an Agrarian Economy" by S S Sivakumar (July 24), equation (4) on page 1120 should read as follows:

$$\frac{(GI - OM)}{L} = X$$



LEIDEN

## South Asia Conference

### Social Anthropology and Politics Dominate

(By a Special Correspondent)

A LIVELY mixture of participants from a wide gamut of countries, the informality fostered by the Dutch sponsors, the high mean quality of papers, a sufficiency of heated discussions, a 'psycho-drama', and a mini-scandal made the Fifth European Conference on Modern South Asia Studies a memorable occasion. The meeting took place under the auspices of the University of Leiden from June 12 to 16 in a most comfortable former theological seminary surrounded, like an Indian village, by cultivated fields. The scent of organic fertiliser wafting in through the windows lent a characteristic rural flavour, while the exceptional drought-cum-heat-wave led some hardy souls to take early morning sea baths in the English Channel, only three kilometres away.

Apart from the Dutch hosts the largest delegation, as in previous South Asia conferences, came from the UK: thirty-odd persons, about half of whom hailed from Sussex University. For the first time France forwarded as many representatives as West Germany: twelve, of whom eight were members of the Centre d'Etudes de l'Inde et de l'Asie du Sud, Paris. There were also about a dozen participants from the Scandinavian countries, an equal number from the US, seven or eight from Eastern Europe (including three from the GDR but no one from the Soviet Union), and one or two standard bearers each from Italy, Switzerland, Pakistan, Sri Lanka, Canada and Australia.

Content and continuity were assured by the participation of established scholars such as Kenneth Ballhatchet (London), Dagmar Bernstorff (Munich), Madeleine Biardeau (Paris), Richard Bingle (India Office Library, London), Bernard Cohn (Chicago), Robert Frijkenberg (Wisconsin), Margaret Haswell (Oxford), J C Heesterman (Leiden), Benedicte Hjelje (Copenhagen), Dirk Kolf (Leiden), Anthony Low (Canberra), Morris David Morris (Seattle), W H Morris-Jones (Institute of Commonwealth Studies, London), S N Mookherjee (Southern Australia), Indira Rothermund (Heidelberg), Alice Thorner (Paris) and John White (Sussex). At the same time the assembly was

leavened with youth; each sizeable country delegation including its contingent of doctoral candidates. Nearly half of the 130-140 men and women present appeared to be under forty years of age.

About twenty Indians took part in the sessions, most of them attached to institutions in England or Germany. Through a happy initiative of the Leiden University, three academics were specially brought over from Delhi for the meeting: Veena Das and A M Shah of the Delhi School of Economics and Ravindra Jain of the Jawaharlal Nehru University. Jain presented an important paper on the borderline between ethnology and history; his subject was kingship, territory and property in pre-British Bundelkhand. Basing himself both on the records and on his own fieldwork, Jain reopened the controversy as to the existence of feudalism in Moghul India and as to the relation between land rights and lineages.

A parallel symposium on the closely related topic of Authority and Kingship in South Asia had brought to Leiden the day before the regular conference began a small group of British and American researchers who had met together previously in the same context. Most of the participants in this seminar, among whom were Peter Hardy (London), Ronald Inden (Chicago), Eugene Irschick and Thomas Metcalf (both from Berkeley) and Joyce Pettigrew (Belfast), also attended the larger conference.

It is tricky to count off the papers presented at Leiden according to the classic academic disciplines precisely because the interdisciplinary tradition of the South Asia meetings encourages authors to cast their nets widely. Very roughly, then, the largest number of contributions, sixteen, would fall into the categories of sociology, social anthropology, sociology of religion, or the borderland between sociology and politics represented by ethnic studies.

#### WOMEN'S CONTRIBUTIONS

Veena Das scored a personal triumph in one of the sociological sessions when she managed to raise the level of discussion by providing a broader frame-

work for the three disparate papers upon which she had been asked to comment. Veena showed that she was fully abreast of the latest developments in her field on an international scale although, as she proudly stated, her entire education had been obtained in India and, in fact, this was the first time she had set foot outside of her native land.

Three other young women made their mark by the verve and authority with which they were able to put across their field research conclusions: Brenda Beck (University of British Columbia) on the role of women in a Tamil folk epic from the region around Coimbatore; Ursula Sharma (Keele University) on the significance of the veiled female face in the villages of Himachal Pradesh, and Maren Bellwinkel (Heidelberg and Zurich) on the cult among urban and rural Uttar Pradesh *chamars* of two saints: Ravidas and Shri Narain. Women of all ages accounted for about one-sixth of the participants, and prepared eight of the forty-four papers. These proportions are strikingly similar to those of the Sussex conference in 1974, where about eighty persons heard twenty-one contributions, of which four were by women.

Despite the preponderance of social scientists, the handful of literary and cultural papers were enthusiastically received. In this category, Indu Prakash Pandey (Schwalbach, West Germany) drew upon the recent Hindi novel "Adha Gav" (half a village) by Masum Raza Rabi for a depiction of the plight of the Shia Muslim landholding families in rural Uttar Pradesh, who were devoted to the cause of a united Hindustan. The creation of Pakistan destroyed their ideological base while the abolition of *zemindari* cut them off from their source of revenue. Peter Schreiner (Tubingen) dealt with nationalism in Bankim Chandra's famous novel, "Anandamath", pointing out that the original mother in the song *Bande Mataram* which first appeared in this book was not India but Bengal. Ashakant Nimbark (Dowling College, US) astounded his audience with a MacLuhan-inspired, diagram-illustrated demonstration that through the medium of television, Indian villagers would be able to pass from their traditional integrated pre-literate society directly to an equally integrated post-literate stage, by-passing literature. Lothar Lutze (Heidelberg) responded with an eloquent defence of reading and writing.



## SOCIAL AND SOCIALIST HISTORY

Historical contributions were relatively few. Far and away the most entertaining was the conscientiously documented study by Kenneth Ballhatchet of the provision of Indian women as prostitutes for British soldiers in the latter part of the 19th century. Horst Kruger (East Berlin) traced contracts between Indian nationalist leaders and the European socialist movement in the early twentieth century. Dick Kooiman (Amsterdam) advanced the intriguing thesis that during the interwar period the nascent trade unions in the Bombay textile industry developed from welfare associations which represented the personal networks of labour-jobbers, and that the ranks of the unions were built up by the co-option of jobbers, the workers following their jobbers into the union since they considered the jobbers their natural leaders. Kooiman's characterisation of the jobbers as a special class of people which had come into being in order to bridge a communication gap between management and workers sparked off sharp criticism from the floor. It was suggested that the jobbers functioned primarily as an arm of capital in its classic confrontation with labour rather than as an independent mediating agency. With reference to the same period, Gyan Pande (Oxford) analysed the Kanpur communal riot of 1931, while Anthony Low highlighted the 1936 clash between Jayaprakash Narayan and Rajendra Prasad on the advisability of giving a representation within the Congress to peasant and trade union organisations. Prasad, who opposed the proposal, won.

Among the eight or ten (according to one's definition) papers dealing with administrative and political questions, mention should be made of the substantial statistical study of trends in state government expenditures by J F J Toye (Cambridge); the colourful account of the place of the sugarcane co-operatives in factional in-fighting in the Congress party in rural Maharashtra by B S Baviskar (Delhi, currently at Sussex); the presentation by B J S Hoetjes (Rotterdam) of the 1967-1970 Bihar Corruption Inquiry; Dagmar Bernstorff's assessment of the abortive Telengana separatist movement as having nonetheless drawn attention to the need for economic development of a backward area and having strengthened political consciousness within Telengana; and the appreciation by Anita Diehl (Lund University, Sweden) of the career of E V Ramaswami Naicker. Despite its position as the last item

in the Conference agenda, the Diehl paper elicited a many-sided discussion from the floor of the intricacies of Madras political manoeuvrings. The question as to whether, on balance, E V R should be counted a political failure remains to be settled by history.

## USE OF MARXIST MODELS

One feature of the Leiden meeting which may point to a new trend in South Asia studies in Europe was the explicit use in several communications of Marxist economic and political models. This was the case in the treatment by John Martinussen (Aarhus) of the expansion of the public sector in Indian industry as being in the interest of the Indian bourgeoisie; in the paper by David Potter (The Open University, UK) on collaboration between the Congress and the imperial bureaucracy in the period just preceding independence; and in the formulation by David Feldman and Alain Fournier (University of East Anglia, UK) of economic and political developments in the Nepal terai in terms of agricultural surplus, expropriation, social formations, and relations of production.

The Feldman and Fournier paper was one of the few which dealt with a South Asian country other than India. A couple of other reports on field work in Nepal were presented by Marc Gaborieau and Gerard Toffin (both of Paris) who described respectively Muslim kinship systems in Central Nepal, and a Newar sacrificial festival in the Kathmandu valley. Hans Christoph Rieger (Heidelberg) also used illustrations from Nepal in his treatment of the Himalayas and the Ganges plains as an ecological whole.

In so far as concerns Ceylon, Michael Roberts (University of Sri Lanka, Peradeniya, currently at Heidelberg) ventilated the ideological factors in the growth of Sinhalese and Tamil sectional nationalisms. Denis McGilvray (Cambridge) narrated amusingly his tribulations in trying to get his informants in the Batticaloa region to talk about blood, which he had hoped would be a key concept in clarifying kinship relations.

## PAKISTAN PAPER WITHDRAWN UNDER OUTSIDE PRESSURE

An explosion of scholarly indignation broke out on the afternoon of the fourth day when the chairman of the session in which the sole paper on Pakistan was to be discussed announced, without further explanation, that the author had withdrawn his contri-

bution. Several senior British and Dutch participants charged that the withdrawal had been made under pressure, and urged that this outside interference in the affairs of the conference be condemned as an unacceptable infringement of academic freedom. Asaf Husain, the author, a young Pakistani associated with the Institute for Third World Studies in Manchester, was nowhere to be seen, although he had been in attendance on previous days. It was alleged, rumours circulating freely since facts were at a premium, that a pair of emissaries from the Pakistan Embassy in the Hague had persuaded Asaf Husain to absent himself. The aim was to preclude public consideration of Husain's well-argued proposition that if the Punjabi elite pursue their current ethnic policies, the dissolution of Pakistan into a number of sovereign states will become inevitable. Effectively, the paper was not taken up for comment on the floor of the conference. But it had already been reproduced and distributed. Once the scandal was out, everyone who had not yet read Husain's piece hastened to do so, and to discuss it at length with friends, colleagues and table companions. At a subsequent plenary session, a decision was taken as to the necessity of avoiding similar incidents in future meetings.

## A DELICATE AREA OF PERSONAL RELATIONS

A disarmingly frank self-criticism by Klaas van der Veen, one of the research workers in the Dutch Sociological project in Bulsar, a small south Gujrat town, in 1970-72, opened up the subject of personal relations between foreign and local members of the team. Earlier, Enno Hommes (Utrecht), the project chief, had offered as a gift to conference participants a three-hundred page preliminary report with the enigmatic title, "Modernisation, Stagnation and Steady Decline". Van der Veen attributed the difficulties which arose, in part at least, to the different attitudes of the Dutch on the one hand and the Indians on the other toward hierarchy, and to their different expectations about the nature of relations between colleagues and between friends. John White enlarged the area under discussion to encompass the rapport between development counselors and the people they are sent out to advise or to work together with. Some of the problems encountered by the German research group in the Dhanbad (Bihar) project, a much larger operation than that of the Dutch



in Gujarat, were related by Indira Rothermund, speaking for the Indian side of the team.

From the comments of subsequent speakers, each one drawing upon his or her own field experience, it became increasingly clear that collaboration in research between foreigners and their South Asian colleagues involves very delicate adjustments on both sides. The main element leading to friction appears to be the financial one. The fact that the foreigners are putting up the funds for the research gives them in effect the right to dictate the aims and methods. It is "their" project. A further cause for resentment is the common practice of paying Indian collaborators at a lower rate and providing them with fewer fringe benefits such as housing and transport. There is also the underlying issue as to who is studying whose society and why. Pratima Bowes (Sussex), a professional philosopher, suggested that equality of status would be achieved only when South Asian research teams began to undertake ethnological investigations in Europe.

Several of these present remarked that the session resembled a 'psychodrama', to the extent that the speakers were able to relieve or reduce their tensions by bringing them out in public. Despite the sensitive nature of the topic touched upon, the exchange of verities between European and South Asian colleagues, many of whom were linked by long-standing friendships, ended in mutual expressions of good will. It was pointed out that the Bular project, in which the existence of frictions had been retrospectively acknowledged and analysed, had achieved by all normal criteria a very considerable success; material was gathered, research reports produced, publication arranged, and doctorates obtained.

#### PLANS FOR PARIS

In a brief business session the assembly accepted by acclamation the invitation tendered by Marc Gaborieau on behalf of the Centre d'Etudes de l'Inde et de l'Asie du Sud (CEIAS) for the 1978 conference to be held in Paris. Some speakers wished to be reassured that papers would not have to be written or delivered in French! It was unanimously agreed that the biennial meetings should continue to be organised in turn by different European institutions rather than through the creation of a new international association.

Some of the subjects suggested to be

taken up in Paris in 1978 were the place of South Asia in the international scene, new directions in social science research within the region, industrial labour history, the role of Christian evangelism, tribal studies, oral literary traditions, and the sociological analysis of religious ritual. The hope was expressed that the next conference might divide its attention more evenly among

#### NEPAL

## Of Trade and Transit

Brahmanand Mishra

INDO-NEPALESE relations seem to be once again deteriorating, and the announcement of the replacement of ambassador Rasgotra by Balakrishna Menon does not seem to have made much difference. Earlier reports from New Delhi had indicated that Kathmandu had given up its demand for two separate treaties on trade and transit and the second round of talks was likely to take place in Kathmandu around the second week of September. But this, however, has not been the case. On August 6, the Rashtriya Samachar Samiti (RSS), Nepal's official and only news agency, reported that "India has expressed its unwillingness to resume talks on trade and transit treaty, the idea of having two separate treaties on trade and transit not being acceptable to India, and Nepal not agreeing to have one treaty on the two subjects". Quoting 'authoritative sources' RSS said "an Indian delegation is however expected to visit Kathmandu sometime in the third week of August in response to an invitation given with the hint that the talks could be resumed on the basis of the existing treaty. Nepal, even so, would continue with determination to press for having two treaties in the ensuing talks, as Nepal in principle would not give up its stand on having two treaties, even though, the idea of two treaties was not acceptable to India at the moment".

On the following day, the government-owned English daily *The Rising Nepal* (and also Radio Nepal) announced that since trade and transit are two separate questions, Nepal had consistently held the view that there ought to be two separate treaties and had accordingly taken such a stand at the recent official level talks in New Delhi. However, since the Indian side did not recognise such a position,

the various countries of South Asia.

Anthony Low, warmly seconded by several other speakers, moved a vote of thanks to the Dutch sponsors for their particularly gracious hospitality. Great merit accrues to Dirk Kolf, the organising secretary, for his sweet reasonableness throughout the two years of preparations and his cool, unobtrusive efficiency on the spot.

maintaining that it was unwilling to continue talks unless the one treaty concept was accepted by the Nepalese side, Nepal without compromising on the imperativeness of the two-treaty concept in future negotiations, made it clear that it was prepared, for this time, to consider discussions under existing conditions and a re-invitation to the Indian side to visit Kathmandu for such talks had been made.

Differences on the trade and transit treaty are not the only irritant between the two neighbours. The India-built 15 feet high 6 km long embankment along Bakaiya river upto the eastern part of Bagmati, only 50 to 60 feet away from the southern border of Nepalese territory, has submerged large areas of Rautahat district including Gaur, the district headquarters. After Nepal drew India's attention to the flooding of Gaur, high level teams from Delhi and Kathmandu visited the innundated area. *The Rising Nepal* under the editorial caption "The Rautahat Flooding" said that "it will be wholly within the bounds of reason to hope that the investigation does not exclude examining the long-term implications of such construction activities in countries sharing common borders and rivers but, equally, also take into account all pertinent aspects as have a clear bearing on international law on such questions". Other papers like *Matribhumi* have made similar comments.

Then there is also a long-standing dispute over Susta, a small stretch of land on the tri-junction of Bihar, Uttar Pradesh and Nepal. Recently a scholarly debate with political overtones has started over Kapilavastu, a kingdom of ancient India to which Gautama Buddha is said to have belonged. While Indian scholars have pro-



pounded the theory that the kingdom of Kapilavastu must have been in Piparahawa, at present part of Baharaich district in Uttar Pradesh, Nepalese

scholars have disputed it saying that Tilawarakot, lying in Nepal's terrain region, must have been ancient Kapilavastu.

## UNITED KINGDOM

# Beyond the Politics of Self-Defence

Farrukh Dhondy

THOUGH the newspapers no longer carry stories about racial assaults and murders on the streets of Britain, the moment of tension that the country experienced earlier this year has by no means passed. In May and June it seemed that the racist lobby in the State, in the media and in the community, had energised itself to make very definite gains. The National Front, the National Party and some sections of the Labour and Conservative parties were using the race divide to win by-elections and populist stature in local and Central government. In parliament they were attempting to push legislation to stop immigration, regardless of the fact that it has stopped anyway. In government agencies, the battles succeeded in replacing racial 'liberals' with racial conservatives.

The backlash from the Asian communities certainly scared a lot of the racial lobby's support off the streets. Some of the self-defence was spontaneous and effective. In the East End of London in July, a lynch mob gathered in Fieldgate Mansions, an inter-war slum, to throw bottles and stones through the basement flat of a Pakistani family. Two children of the family were seriously injured. Sabur Hussain and his wife confronted the fifty strong mob, wading into their midst swinging an iron pipe. Hussain laid two of the attackers low, causing the others to retreat a few yards and phone the police. The police picked up the fractured and bleeding assailants off the street, took a quick look around Hussain's smashed home and decided not to charge him with assault or attempted murder as the crowd outside were demanding.

Incidents such as these have left some of the racist support cowed, though unconverted. In the areas where Asians are concentrated, the random assault is likely to turn into confrontation. Asian self-defence has not destroyed the racial attacks; it has scotched it, and sent it scurrying to new terrain. In the East End of London the new political organisations of the Asian community, spend a consi-

derable amount of their time and energy providing physical defence for the isolated Asian families under attack from their neighbours. In the last resort, organisations such as the Bengali Housing Action Group (BHAG) and the Anti-Racist Committee for the Defence of Asians in East London (ARC-AEL), take a squad of activists in van-loads to evacuate a family who may have been besieged for a day or two by a stone throwing mob, carry them off the council estate and instal them in the relative safety of a 'squat' in the Asian ghetto.

The organisation of self-defence in the Asians communities has led to the birth of a new leadership and to opposition from the old one. For the first time, a generation of Indian, Pakistani, Bangaldeshi and East African Asian workers in their late teens and twenties has taken the stage of organised politics. In Southall, Whitechapel, Blackburn, Bolton, Manchester and Bradford, this leadership is grouping beyond the politics of self-defence, to the politics of a material offensive on the community's behalf. In Whitechapel (broadly referred to as 'the East End') they have clearly won the community's support and are poised to wrest a new deal on housing from the State, and potentially, to address themselves to organisation of the sweat-shop workers at the point of production.

There are some in the Asian community who view this questioning, this paving the way for material class-struggle, this organising of the working class' antagonism to the repressive apparatus of the State, with alarm. Amongst them there are those who themselves own the sweat-shops and have carved out for themselves a place in the economy as the deliverers of Asian labour power to the capital resources deployed in the clothing and leather traders. There are amongst them the Asian estate agents and businessmen who have bought or fought or cheated their way out of the Asian worker strata. And there are those who make a living through, or by connection with, the 'establishment' — the

Labour and Tory politicians, businessmen, landlords, financiers, bankers etc.

Their quarrel with the fledgling 'new' organisations emerged in the open when two separate national demonstrations against racism were called for the 4th and 11th of July in London. The organisers of both demonstrations were uncertain of the support they would eventually get. In spite of efforts by well-wishers to put the two demonstrations together into one, the Indian Workers' Association of Southall, the chief begetter of the first effort, and the Indian Workers' Association of Birmingham, the central force in the second, resolved to leave their differences unresolved. Both demonstrations claimed to have mobilised six thousand people, half of these in each case, contingents of the Communist Party and fringe Trotskyist groups. On both platforms, the battle between the old and the new was joined. The Pakistani federation of Blackburn insisted on representing the Asians of Blackburn. The Asian youth organisation claimed that its own coachload had more people (and even more Pakistanis) than that of the Pakistani federation and had, therefore, the right to represent Blackburn. The Asian Youth Federation of Southall, who tuned up at both demonstrations six hundred strong, marched into the rally with accusations that the Indian Workers' Association leadership had promised to provide transport, and had then stranded them twenty miles away in Southall in a ploy to keep them from showing their strength.

On the demonstration of the 11th as the mass moved through London's streets, stopping at 10 Downing Street to deliver a protest to the Prime Minister the police decided to rush things and jumped the organisers' truck and drove it away. The Southall youth were in favour of turning the whole march around and occupying the Centre of town till the truck was returned and the police accepted responsibility for injuring three people who fell off it during its hijacking by the police. The organising stewards were for marching on. They had not anticipated any confrontation with the police. The tactical dispute led to blows while the London constabulary stood by with broad grins.

In the ghetto, events took a grimmer turn. In Blackburn the organisers of the Youth Federation were severely beaten up by men who were alleged to be in the pay of the leaders of the Pakistani Workers' Association. In public, the men who have led the various



Asian associations such as the Indian Workers, the Bangladeshi Workers, the Pakistani Workers, pledge Asian solidarity. Behind the scenes, they work in the ways available to them to discredit and destroy the new organisations which threaten to bury them.

In the past few months several attempts have been made to rally the old forces. On the first of August the Pakistani organisations in Britain announced that they were amalgamating to form a broad united front. At the national level, Asians and West Indians have been given money and encouragement to form an elected pseudo-parliamentary body to 'represent' black people'. The new legislation has scrapped the Race Relations Board which policed the law on racial discrimination, and the Community Relations Commission, which was dedicated to the building of harmonious relations amongst immigrants and the host com-

munity; we have now instead an Equal Opportunities Commission. But it is doubtful whether the Commission, chaired by a well-meaning Tory MP, will provide the mechanism for channelling the demands around which blacks have begun to organise themselves. Neither can the black section of the working class turn to organisations such as the Indian Workers' Association, as anything more than a mediating agency between the mass of black people and the State. For years these organisations have fought for nothing more than this position of rightful mediators. By those on the dole queues, the slum schools and the slum estates, by those on the housing waiting lists and in the hard-pressed lower echelons of antiquated industry, they have been judged as such. A new political generation has begun the battle against them, declaring that they come to bury the mediators, not join them.

of the Sudanese ex-Amyanya guerillas. But as Amin's military apparatus turned into a non-national mercenary force, his political crisis intensified. Without a social base among any of the classes in Uganda, Amin's rule was transformed into a naked dictation of arms.

This internal crisis coincided with a crisis in Amin's foreign relations: on the one hand, his estrangement from his former allies, Israel and Britain; on the other hand, his becoming the focus of superpower rivalry on account of his newly-found friendship with the Soviet Union.

Britain and Israel were firm supporters of Amin's 1971 coup. Obote's breaking relations with Britain over the Rhodesian UDI and his attempts to form a 'progressive bloc' at the 1971 Singapore Commonwealth Conference were sufficient reasons to sour British-Ugandan relations. Israel's disenchantment with Obote ran even deeper. Ever since 1963, Israel had a 'presence' in Uganda, later even training the police, the intelligence services and a section of the army. After 1969, Uganda occupied a central place in Israel's Arab-African strategy. Northern Uganda was the base Israel used to materially assist the Amyanya guerillas in Southern Sudan. But with the rise to power of Jaffar Nimeiri in the coup of May 25, 1969, Sudan-Uganda relations improved visibly. An end was put to Israel's training of the police force and the intelligence services; at the same time, its use of Northern Uganda to fan the flames of the civil war in Southern Sudan was terminated.

But neither Britain nor Israel expected the treatment that was meted out to them in the two years after the coup. The pro-Obote soldiers had run south to Tanzania and north to the Sudan, establishing guerilla training camps in both countries. In return for a promise from Nimeiri to close down the Obote camps in the Sudan, Amin continued the ban against any Israeli presence in Northern Uganda. Israel attempted economic blackmail but Amin retaliated by expelling the Israelis. Relations with Britain soured as Amin's 'economic war' against the Indian businessmen went into its second stage, this time engulfing the British banks, the financiers of Indian business.

Israel, and along with it Britain, attempted to organise an economic and military boycott of Uganda, but without active American assistance they were powerless. When Britain clamped a

## UGANDA

# Amin's Hour of Reckoning

Hassan Mwenyeji

ON July 4, Kenya imposed a blockade on the supply of oil to Uganda from its Mombasa-based refineries. Uganda being landlocked and highly vulnerable to economic retaliation from Kenya which is its lifeline to the sea, Amin attempted alternately to cajole the Kenyatta regime into co-operation, and drive it with threats of armed retaliation into submission. But the blockade continued. On July 24, Amin announced that the country was left with only five days' oil supply, and informed the UN and OAU that he might be compelled to go to war in self-defence. Kenya pointed out that Amin's supply was more likely to last 100 days and remained adamant on the question of the embargo.

It is now clear that the embargo is in fact part of an attempt to topple the Amin regime. The exaggerated confidence of the Kenyatta regime springs from the strength of the interests that are aligned in support of it: the US, Britain and Israel; and weakened by a longstanding internal crisis, Amin is likely to fall victim to the very superpower rivalry that he has exploited so well in the past.

The 1971 coup that brought Amin to power was internally supported by the coalition of Southern kulaks and

traders, the social base that Amin consolidated with the expulsion of the Indian petty and commercial bourgeoisie. With the spoils of the 'economic war', these petty bourgeois traders blossomed into a commercial bourgeoisie. A section of the army officer corps joined the ranks of these property-owners on the march. It was not long before that property demanded power and sections of the army allied with the new wealth began attempts to replace Amin. The very success of the 'economic war' had destroyed the conditions of Amin's highly personalised rule.

Amin's response was on the one hand to direct the apparatus of repression against the most advanced and the most ambitious members of the commercial bourgeoisie and to terrorise them into submission. The businessmen, the ardent supporters of Amin's rule at the time of the 1971 coup and the 1972 expulsions, and who were then so delighted with this rule by proxy suddenly found themselves at the receiving end of Amin's repression. At the same time, Amin sought to neutralise the 'unreliable' sections of the army by simply disarming them and offsetting them with a core of over 4,000 heavily armed soldiers, recruited from the ranks



boycott on Ugandan imports after the Indian expulsion, the United States refused to follow suit; instead, it bought the whole of Uganda's coffee crop — over 50 per cent of its net exports. Amin meanwhile astutely exploited intra-imperialist rivalries, now turning to the Soviet Union for his arms supplies.

What changed the US position was the Soviet thrust into Africa with the Angolan war. In the following months, the United States strove feverishly to recoup its losses. Following Henry Kissinger's visit of early May, an American military delegation visited Africa in the latter half of the month. In mid-June, the US Secretary of Defence Donald Rumsfeld toured the continent, marking the first such visit by an American Secretary of Defence. The *New York Times* said he would discuss arms "aid" to "meet growing Soviet military influence in Africa". In June, the US ambassador to the UN, William Scranton, visited 11 African countries. Presently, the American Assistant Secretary of State for African Affairs, William Schaefe, Jr, is still in the continent.

The US initiative is not simply limited to militarily shoring up the position of its African clients. Its aim is far more ambitious: to strike at the weakest points of Soviet penetration. The internal crisis of the Amin regime and its military support by the Soviet Union qualifies Uganda as the first target of

US imperialism seeking to recover after its defeat in Angola.

It is only this strategic perspective of superpower rivalry that clarifies the meaning of the chain of events that has unfolded over the last few weeks, put slightly off course by the Palestinian hijack of the Air France airbus and the subsequent Israeli invasion of Entebbe airport. While the US publicly promised to deliver 12 Northrop F-5 fighter bombers to Kenya to counter the build up of Soviet MiGs in Uganda, it actually delivered through Iran over 50 British hunter jets. Then followed the arrival of part of the US Seventh Fleet at Mombasa. The next step was the Kenyan oil blockade. Finally came the announcement in Philadelphia of the formation of the so-called Popular Front for the Liberation of Uganda at a press conference attended by both the former US ambassador to Uganda and the Israeli consul in Philadelphia.

This is not the first time a superpower has sought to utilise a people's discontent with an oppressive regime to impose its own solution by using the services of a neighbouring comprador State. Certainly, there is not in the present circumstances any organised force that could topple the rule of property in Uganda. But it should be clear that if Amin is toppled, any regime that comes to power, given the very manner of its ascent, cannot but be a lackey of American imperialism.

can work hours on end on the clever working of the joint communiques. But they can do precious little if matters of diplomacy get inevitably mixed up with matters of history. Geography, economics and power are not the only determinants of the state of Indo-Pakistani relations. They cannot be. There is that 'history'.

History and prejudice, too, one must add. Twenty-nine years after the partition the Indian and the Pakistani minds have not moved very much towards disentangling history and prejudice. Curiously the diplomatic battles between India and Pakistan have a strong resemblance with the competition between the Congress and the Muslim League during the pre-independence days. Rarely, if at all, has a domestic quarrel been forced on to the international stage in such a hurry. The people who inherited the British mantle in the separate states of India and Pakistan hardly realised what it meant to carry the Congress-Muslim League quarrel on to the international plane. By the time they realised it, it was perhaps too late. A bloody pattern of wars and periods of 'normalcy' had been by that time imposed on the hapless people of India and Pakistan.

Of course, the partition of a country is not exactly unprecedented in Asia. Korea is divided. Vietnam was divided till the other day. The curious thing about our partition was that the people on both sides of the border were rather similar, if not the same. Diem and Ho had nothing in common. Kim and Park have very little in common either. They represent the opposite ends. If race and civilisation made them Vietnamese and Koreans almost everything else made them sworn enemies of each other. The Indian partition, however, did not divide the people in this subcontinent in terms of their visions of the future. Bhutto could well be an Indian statesman. Dev Kanta Barooah, one feels sure, will have several counterparts in Pakistan. We have a campaign against dowry. The Pakistanis have just now passed a bill limiting the dowry. This is just one of the many points of similarity between the two political systems. One need not labour the point. What then are these gentlemen fighting about?

Fighting they are every ten years or so. If the normalisation drive is limited to cliches, trains and so on, they might well fight again. The basic attitudes have not changed. This is not a foreign policy issue. It is basically an issue of what kind of transformation Bhutto or Indira Gandhi are looking

## INTERNATIONAL AFFAIRS

### Train to Lahore

G P D

THE train to Lahore left on time. Doordarshan presented a nice little programme on the occasion. Lahore, more than any other Pakistani city, evokes fond memories. Some old folks think of the Ravi Congress. Some others think of the university and the gardens. Every normalisation with Pakistan brings in its wake a fund of goodwill, a host of memories and of course, a fairly big chunk of cliches. One could see all that the other evening watching the special Doordarshan programme.

What was not stated in all the speeches and comments on the 'Samjauta Express' was the fact that this was not the first normalisation between India and Pakistan. K S Bajpai and Syed Fida Hussain have had distinguished predecessors who landed in Islamabad/Karachi and New Delhi, respectively, to sweep the dust away

from the embassy porticos. To be sure, relations had not been snapped. But they had been very close to that more than once. 1971 may have been the last war between India and Pakistan; but it surely was not the first. The tensions between the two neighbours had never really disappeared. In spite of the fanfare at the Attari railway station, they have not disappeared even now.

It is obvious that normalisation of relations between India and Pakistan is going to be the most difficult assignment for foreign policy makers whether here or there. This is not because there is anything fundamentally antagonistic between these two peoples. It is because in the ultimate analysis this is not a problem of foreign policy either here or there. The foreign policy makers can devise various projects. They



for in their respective spheres. The question is: are they willing or able to set in motion forces which will actually fight prejudice and fear. A lot in Indo-Pak relations is going to depend upon that. We have so far little evidence that either government is willing or able to do that. It is not easy to live down fifty years of history. But that is precisely the reason why a gigantic effort is called for. Unless it is forthcoming, the latest normalisation of relations between India and Pakistan might prove to be one more period of

relaxation before the tensions build up again. Till then one cannot take this normalisation very seriously. A few academics, a few journalists, a few poets may be able to visit the other country. An Indian sitar recital may occasionally be heard in rapt attention by the Pakistani ambassadors. High-flown poetry would be exchanged. Nothing else would have changed. Underneath the brittle superstructure of 'normalisation', a far harder and unpleasant base would have survived.

of published data and field studies of their own have raised many issues worth pondering over. It is impossible to touch upon all of them here. But the following aspects deserve special consideration.

(1) According to the Dandekar-Rath study of "Poverty in India"<sup>1</sup> based on NSS consumer expenditure patterns, Kerala was seen to have the largest percentage of population below the poverty line, 90.75 per cent in rural areas (with Andhra Pradesh taking the second place with 62.14 per cent) and 88.89 per cent in urban areas (with Tamil Nadu coming second with 70.78 per cent). The exceptionally high proportions for Kerala and the big gulf between it and other states had led the authors to say that Kerala was a "peculiar" case and to speculate about the reasons for the peculiarity. One of the members of the group responsible for the present study had taken up this question,<sup>2</sup> and the problem is studied further here on the basis of food balance-sheets compiled for the state (details of which are included as an annexe to the study). It turns out that part of the problem was the explanation given by Dandekar and Rath that "the National Sample Survey has underestimated certain items of food such as banana, coconut, and fish entering into the diets of these people and that consequently the extent of malnutrition in Kerala has been somewhat exaggerated". The difference between the per capita calorie intake per day according to NSS data and the food balance-sheet is shown in the Table. According to the food balance-sheet only 48 per cent of the population of the state failed to get a per diem intake of 2,200 calories as against the NSS estimate of 85 per cent.

(2) This is an important finding in itself and suggests the need for more thorough scrutiny of regional variations in diet patterns before one draws the poverty line by counting calories. But analytically, and from policy point of view, a more impor-

## REVIEW

# Vindication of 'Growth with Redistribution'?

C T Kurien

**"Poverty, Unemployment and Development Policy.—A Case Study of Selected Issues with reference to Kerala", prepared by the Centre for Development Studies, Trivandrum; United Nations, New York, 1975, \$ 9.00.**

THE development strategy of the Second Development Decade of the United Nations was spelled out officially as follows:

"As the ultimate purpose of development is to provide increasing opportunities to all people for a better life, it is essential to bring about a more equitable distribution of income and wealth for promoting both social justice and efficiency of production, to raise substantially the level of employment, to achieve a greater degree of income security, to expand and improve facilities for education, health, nutrition, housing and social welfare, and to safeguard the environment. Thus, qualitative and structural changes in society must go hand in hand with rapid economic growth and existing disparities — regional sectoral and social — should be substantially reduced. These objectives are both determining factors and end-results of development; they should therefore be viewed as integrated parts of the same dynamic process."

It was therefore decided that studies which view development not as a mere economic phenomenon, but as "a complex whole" without drawing any boundaries between economic and social factors should be undertaken in different parts of the world. The study of Kerala was commissioned to evaluate selected measures against poverty and unemployment and their implications for development policies in densely populated regions. More

specifically, the objectives of the study were to analyse the effect of (a) public work programmes designed to raise the productivity of land and other assets and to create additional employment; (b) food aid and related nutrition programmes; and (c) changes in the educational system on the problems of unemployment, income distribution and patterns of consumption in densely populated developing economies. The United Nations could not have chosen a better spot than Kerala to study these issues. With over 550 persons per sq kilometre it is the mostly densely populated state in India, in fact, one of the most densely populated regions in the world. Its per capita income is low, and according to many recent interstate comparisons it has one of the largest proportions of the population below "the poverty line". Yet it leads the rest of the country in literacy rate and educational attainments and has the lowest mortality rate and longest expectation of life among the different states of the Union. The state has also attracted attention by its political experiments and progressive policy measures, especially in the areas of land reform and public distribution of food.

The group of people at the Centre for Developing Studies who conducted the study on the basis of analysis

TABLE: KERALA, PER CAPITA CALORIE INTAKE PER DAY, 1961/1962

	NSS Data	Food Balance-Sheet
Rice	1,133	1,059
Tapioca	240	575
Coconut	0	245
All other food items	246	459
All food items	1,619	2,337



tant factor has been featured in the study, that per capita consumption of food does not depend on per capita income alone, so that while a low consumption of food may indicate under-nourishment, it need not necessarily cannote "poverty". By making a detailed interstate comparison it is shown that per capita consumption of food in a region depends also on per capita production of food and the patterns of the distribution of land holdings, with reduction in inequalities being positively correlated with increase in food consumption. The analytical significance of this finding is that "availability" of food cannot be treated as a function of income and price alone; it may depend more on "physical" factors such as output in the region and "institutional" factors such as land holdings. Those who are in the business of "developing economics" had better learn to deal with these not so nice entities in their studies of poverty, unemployment and the like! From a policy point of view the lesson to be learnt is that increases in aggregated output of foodgrains are not adequate to ensure that food will become available everywhere and to every body, and hence the distributional aspects re-

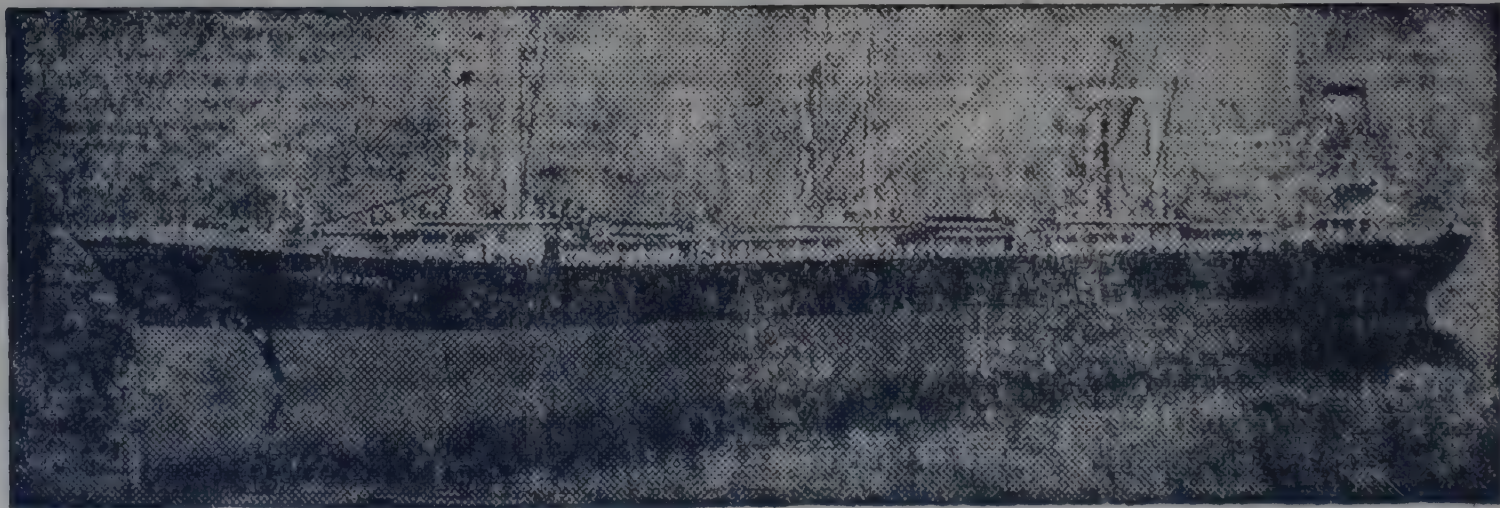
quire as much attention as the grow more food campaigns.

(3) Even if it were true that per capita intake of food in Kerala on the whole is low, the public distribution system ensures that low income groups are not completely neglected. The sale of foodgrains through fair price shops in Kerala is probably most comprehensive in the sense that, unlike in any other state in the country, its effective coverage of households is virtually complete, leaving out only some 3 per cent who are considered to be "full producers". The rationing system is "informal" allowing the "free market" to supply part of the requirements, but it is shown that the bottom 30 per cent got two-thirds of its average cereal consumption at controlled prices. Here again the main question about a public distribution system is not whether it exists or not, but (as the study points out) whether it is able to meet the minimum consumption requirements of the poorest sections of the rural population. The system, as practiced elsewhere, "is geared largely, if not wholly, to the requirements of the urban population, not necessarily as being more vulnerable but possibly because urban dwellers are more in-

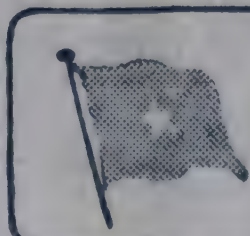
fluent socially and politically." To make the public distribution system work effectively Kerala has very high rates of producer levy, and yet total procurements do not exceed 10 per cent of domestic production. This is the result of bogus land "redistributions" achieved by parcelling of land in the names of various household members, including minor children, so that each land holding turns out to be below the levy level.<sup>5</sup>

(4) Kerala has a long history of land reforms and some progressive measures of land reform abolishing tenancy and providing house sites to the poor have been implemented in recent years. The land reform measures accompanied by the high level of wages (possibly between one-sixth and one-fourth of value added in agriculture) would have reduced inequality in income among the agrarian households, once again showing how policy measures can be directed towards "those below the poverty line".

(5) With rapid decrease in the death rate, the population of the state has been increasing significantly leading also to a decrease in the participation ratio which has fallen from 45.0 per cent at the turn of the century to 29.2 per cent at the time of the 1971



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Census. The main contributory factors, it is maintained, are the lower rates of female participation in certain kinds of economic activity and, more generally, delayed entry into the labour force consequent on the spread of schooling and larger periods spent in education. With the increase in population and the various changes taking place in the economy there has also been an increase in the proportion of agricultural labourers. Among the agricultural labourers and the "educated" unemployment is very acute also. Underemployment also is widespread, calculated to be at least 12.5 per cent of those employed. In spite of the unemployment and underemployment, there has been a significant increase in the wage rate, the percentage increase in the daily wage rate of field labour between 1965-1966 and 1970-1971 in Kerala being the highest in the country.

(6) Kerala attempted an imaginative public works programme, "the labour-cum-development bank", which aimed to mobilise surplus labour to meet local requirements such as lift irrigation through a scheme which enabled the recovery of the cost from the beneficiaries and the creation of savings to match part of the assets created by providing that a part of the wages paid would have to be accepted in the form of a three-year fixed deposit. This innovative scheme, however, did not have the kind of success it was expected to have because of certain administrative difficulties, lack of co-operation on the part of the beneficiaries and the operation of some vested interests.

(7) Kerala has a success story to tell about its educational programmes. It has one of the highest enrolment ratios in the country and a very low dropout figure. The policies of the recent past have not only helped in raising the levels of education in general but also resulted in a certain evenness in these levels. But the high level of education has resulted in high levels of unemployment among the "educated", particularly among these with above matriculation standard. The incidence of this unemployment falls more heavily on the weaker sections. The problem is explained thus: "... Waiting periods (for employment) tend to be inversely related to levels of education: the higher the education the lower the waiting period. But educational attainment itself would depend on family income because higher incomes offer greater scope for higher education. As a consequence poorer

people have lower levels of educational attainment; the result is that they have not only longer waiting periods but also fare worse in terms of pay received".<sup>6</sup>

(8) Through a well conceived public health programme with high accessibility to all sections of the population Kerala has succeeded in bringing down its death rate sharply during the last three or four decades with its present mortality rate of less than 10 per 1000 population comparing favourably with the situation in even the developed countries of the West. There has been a reduction in the birth rate also though not as spectacular as in the death rate. But it deserves attention all the same because it has been achieved without increase in per capita income, industrialisation or urbanisation.

Such is the profile of poverty and unemployment that emerges from the study. It is an account of achievements and of setbacks and an extremely valuable documentation of a very interesting case. But, of course, this can only be the beginning. The Foreword mentions that the study is intended to be a catalyst and the concluding chapter confesses that the study is incomplete "because the questions it raises are more numerous than those it has helped to answer". The answers themselves raise further questions.

First, if per capita production of foodgrains and the distribution of land are important correlates of per capita consumption of food along with per capita income, it is necessary to trace more thoroughly the nature of the interrelationships involved. In particular, how and to what extent did the land reforms in Kerala affect the pattern of production, especially food production in the state? Is there evidence to suggest that per capita production and consumption of food did change as a result of the land reforms reducing inequalities?

Second, what other effects did these land reforms have? Did they, for instance, lead to the unemployment among agricultural labourers and the increasing wage rate?

Third, Kerala has achieved high levels of education and public health. Since it stands way above all other states in these respects what price (in terms of alternatives foregone) was paid for these? What impact will these choices have on the future course of development in the state? Is this a pattern that other states should adopt

or avoid in terms of long term perspectives?

Fourth, many of the Kerala experiments underline the importance of decentralised decision-making and implementation of development programmes. What kind of administrative and political changes are necessary if such decentralisation is to become effective?

And, finally, is the Kerala story a vindication of the UN strategy of "growth with redistribution", or is it a warning that "development" is not only growth in per capita income (strategy of the First Development Decade), and not even growth plus distributive justice (strategy of the Second Development Decade)? How far can public distribution help the "weaker sections" when its complement, the "free market", pulls the system in the opposite direction? How much of grain can be collected through levies when the laws relating to property rights provide enough loopholes to evade the levy? How far can land reforms go when the bulk of the agricultural workers cannot have any claims on land? To what extent can education and other social services reduce economic and social inequalities when the basis of those inequalities continue to exist? And what may be the impact of public works programmes when vested interests can turn them to their own advantage? In sum, is development a process of making more and more concessions to the poor, or must it take a different course based on different premises and different goals?

## Notes

- 1 V M Dandekar and N Rath: "Poverty in India", *Economic and Political Weekly*, January 2 and 9, 1971.
- 2 P G K Panikar, "Economics of Nutrition", *Economic and Political Weekly*, Annual Number, January 1972.
- 3 p 23, note 3.
- 4 p 149.
- 5 For a recent assessment of the levy system in Kerala, see Vincent Panikulangara, "Paddy Procurement through Producer Levy: A Case Study of Kerala", *Social Scientist*, March 1976. The study shows that procurement in absolute terms and as a percentage of total output has been declining since 1969 and that in 1974 it was only 3.16 per cent of output.
- 6 p 129.



# When Poverty Starts Disappearing

Anand P Gupta

*What are the employment implications of the variations in output growth rates following from redistribution of private consumption in favour of the poorer classes?*

*It is not easy to deal with this question, as it requires detailed information on the employment coefficients of all the sectors. Such information is not available. Therefore, all that one can do is to make careful use of whatever data are available. This is what is sought to be done here.*

THE practice of writing without doing the required homework appears to have reached such a point that even reputed people end up saying things that are not true at all. A recent study, sponsored jointly by the Social Science Research Council and the Royal Economic Society, and financed by the World Bank, provides a good example of such practice.<sup>1</sup> Among other things, the study 'reveals' that fashions sweep the profession so quickly nowadays that as many as three independent empirical studies of the employment implications of income redistribution in favour of the poor have been, or are being, undertaken for India alone, and that the authors of these studies are Pranab K Bardhan, the Planning Commission, and Raj Krishna.<sup>2</sup> Nothing can be farther from the truth. I have done the necessary checking and have found that no empirical work on the employment implications of income redistribution in favour of the poor has been done by any of the three.

It is not easy to come up with quantitative estimates of the hypothesised effect on growth of employment which reduction in inequality would have in a country like ours. This is so, because of the various conceptual and measurement problems in arriving at such estimates. While we do recognise these problems, we feel that, considering the seriousness of our employment problem and the consequent urgent need to increase the labour intensity of output, the time has come for the planning authorities in the country to give serious thought to incorporating into planning models the employment implications of reduction in poverty and inequality. Indeed, we have a feeling that, despite all the limitations and the inadequacies which the data-base of our economy suffers from, an attempt can still be made to throw at least some light on what may be expected for the rate of growth of employment if there is a reduction in poverty and inequality in the country.

A quantitative exercise undertaken by the Planning Commission in connection with the preparation of the Fifth Five-Year Plan has yielded some reasonably useful data. We believe that these data, together with the data available from other sources, can be used with advantage to get at least a rough idea of the employment, and some other, implications of reduction in poverty and inequality in India. The Planning Commission data are contained in "A Technical Note on the Approach to the Fifth Plan of India 1974-79" (April 1973). Among other things, this document presents macro-economic projections in respect of 24 alternative cases, data on sectoral growth rates under these alternative cases, data on sectoral import co-efficients, and data on sectoral consumption proportions 27 expenditure classes.

The data on the sectoral consumption proportions relevant to the different expenditure classes give a fairly realistic idea of the differences in the consumption patterns of the rich and the poor, in the rural and in the urban areas. Table 1 presents these data for the lowest and the highest expenditure classes in these areas. It will be seen that, while the poorest among the poor incur over 59 per cent of their total expenditure on foodgrains, the rich do not incur even 15 per cent. Similarly, the very poor clearly incur a higher proportion of their expenditure on forestry products than do the rich. Products of sectors like 'other agriculture',<sup>3</sup> sugar and gur, and vegetable oils, can also be included in this category. On the other hand, we find that the very poor incur nothing, or very little, of their expenditure on products of sectors like 'other food products', 'other textiles', miscellaneous textile products, wood products, paper and paper products, rubber products batteries, electric household goods, radios, motor vehicles, watches and clocks, printing, railways and other services. This being so, one can work out the sectoral demand implications of redistribution.

The Planning Commission has considered a fairly drastic redistribution of private consumption expenditures — such that over the Fifth Plan period the average per capita consumption of the lowest 30 per cent of income recipients would rise by as much as 59.43 per cent and that of the top 10 per cent income recipients would decline by 13.69 per cent — and has worked out for 66 sectors the output growth rate implications of such redistribution. The effect of redistribution of private consumption in favour of the poorer classes of the population is reflected in an increase in output of some essential commodities and a decrease in output of a number of non-essential and luxury goods sectors. There are at least 28 sectors (accounting for about two-thirds of the country's gross domestic product in 1973-74) in which redistribution would entail a change of over 10 per cent in the rate of growth of output (Table 2, column 4). In the remaining 38 sectors, the changes in output growth rates are of a relatively small degree. But this does not mean that redistribution has no significant effect on the rate of growth of output in these sectors. The relatively low degree of change in the growth rate of output in some of these sectors may be due to the level of aggregation or type of composition adopted by the Planning Commission. The products covered by at least some sectors (e.g. other metal products,<sup>4</sup> motor cycles and bicycles, and other transport<sup>5</sup>) are such that they meet the demand of both the upper and the lower income groups. Consequently, the favourable and the unfavourable effects of redistribution on output to a large extent offset each other. This suggests that a relatively more detailed disaggregation of the Indian economy, than what has been attempted by the Planning Commission, or the recombination of the present 66 sectors, can throw some additional light on the effect of redistribution on output growth rates.



The relevant question which arises at this stage is: What are the employment implications of the variations in output growth rates following from redistribution of private consumption in favour of the poorer classes? The Planning Commission does not say anything on this.

We recognise that it is not easy to deal with this question, as it requires detailed information on the employment co-efficients of all the sectors. Such information is not available. Therefore, all that one can do is to make careful use of whatever data are available. This is precisely what we have done.

Table 3 presents data on the employment implications of a reduction in inequality of private consumption expenditure in India. The data relate to 22 sectors which contain all the 66 sectors considered by the Planning Commission.

Data in column 2, which have been obtained from the Planning Commission's Draft Fifth Five-Year Plan 1974-79, Part I (1973), give the weights of the different sectors in the country's economy. Columns 3 and 4 present data on the average annual growth rate of gross value added, with and without reduction in inequality. These have been arrived at by multiplying the sectoral output growth rates by the relevant ratios (ratios of sectoral rates of growth in gross value added to sectoral output growth rates). It may be noted that the sectoral output growth rates which we have considered in this study correspond with the Planning Commission's variants 3A and 3B and not with variants 3C and 3D.<sup>6</sup> This has been done to bring out the effect of reduction in expenditure inequality *without this effect being distorted by the impact of import substitution*.

Columns 5 and 6 present data on the average annual growth rates of employment, with and without reduction in inequality. These data have been arrived at by using the employment co-efficients (percentage increase in employment per one per cent increase in gross value added) estimated by the Institute of Applied Manpower Research, New Delhi. Data in columns 7 and 8 are based on those in columns 5 and 6.

The striking feature of the data presented in Table 3 is overall employment effect of reduction in inequality in the distribution of private consumption expenditure. These data show that redistribution of private consumption expenditure in favour of the

TABLE 1 : SECTORAL CONSUMPTION PROPORTIONS IN SELECTED EXPENDITURE CLASSES

Sector	Limits of Per Capita Monthly Private Consumption Expenditure (Rupees)			
	0-10		Above 200	
	Rural	Urban	Rural	Urban
Foodgrains	.70781022	.9575585	.14442440	.06288701
Other agriculture	.17596224	.12116178	.13121605	.09247370
Animal husbandry	.01063996	.01900905	.11656677	.09045589
Forestry	.01018418	.02252655	.00163654	
Coal		.00503757	.00128109	.00140778
Sugar and gur	.00912459	.03658388	.01367409	.01742296
Vegetable oils	.00466292	.01779564	.00545857	.01119404
Tea and coffee	.00135137	.00699721	.00719459	.00761210
Other food products	.00781996	.01923914	.08107645	.13090077
Cotton tex tiles	.04480009	.01659083	.06669157	.02281898
Other tex tiles			.01777828	.01905422
Miscellaneous textile products			.02118812	.02443999
Wood products		.00201706	.01503689	.00404029
Paper and paper products	.00016563	.00177382	.00542712	.00687155
Leather and leather products			.00375262	.00590261
Rubber products			.00247989	.00663882
Plastics			.00094846	.00137898
Cosmetic and drugs	.00379340	.01214084	.00864694	.01312393
Other chemicals	.00005218	.00017584	.00112733	.00176945
Petroleum products	.00219019	.00584973	.00864658	.00868066
Other non-metallic mineral products		.00318413	.00557498	.00155222
Other metal products		.00203596	.00417687	.00058018
Office and domestic equipments			.00065353	.00142931
Batteries			.00146956	.00260831
Electric household goods			.00172498	.00549111
Radios			.00360124	.00670782
Motor cycle and bicycles			.00067987	.00354817
Motor vehicles			.01487808	.03903844
Watches and clocks			.00021368	.00110492
Other industries	.00089065	.00130012	.00338660	.00180510
Printing		.00167314	.00208225	.00355643
Electricity			.00616888	.02441967
Construction	.00417178	.03375194	.02025187	.09348026
Railways	.00565125	.01765959	.03175114	.02559059
Other transport	.00131338	.01964027	.02261135	.02014703
Other services	.00941677	.03810031	.22652328	.22986675
Total	1.0	1.0	1.0	1.0

Source : Government of India, Planning, Commission, Perspective Planning Division  
 "A Technical Note on the Approach to the Fifth Plan of India 1974-79"  
 New Delhi, 1973), Annexure IV-6.

poorer classes of population would change the output-mix in the country in such a manner that the average annual growth rate of employment would register an increase of over eleven per cent.

It is indeed the interaction between the changes in output-mix and the observed labour intensities of various sectors which determines the employment effect of redistribution. And it is this interaction which explains the rather strange employment effect in certain sectors. Take the case of manufacturing. Here, the average annual growth rate of value added with reduction in inequality is lower than that without reduction in inequality, but the effect on manufacturing employment due to a reduction in inequality

does not show a negative sign. This is because the change in the output-mix in the manufacturing sector is of such a fashion that the decrease in the average annual growth rate of gross value added due to reduction in inequality (from 7.54 to 7.31 per cent) has been more than offset by the shift of the output-mix in favour of relatively more labour-intensive sectors such as 'other industries'.<sup>7</sup>

Even more, a careful survey of the country's scene suggests that the employment implications of redistribution of private consumption expenditure in favour of the poorer classes may be more favourable than what the foregoing discussion suggests. There are at least two considerations that support this view. First, it has been argu-



TABLE 2 : AVERAGE ANNUAL GROWTH RATES OF SECTORAL GROSS OUTPUT WITH AND WITHOUT REDUCTION IN INEQUALITY IN EXPENDITURE DISTRIBUTION

Sector	Average Annual Growth Rate of Gross Output		
	With Reduction in Inequality	Without Reduction in Inequality	Column 2 as Percentage of Column 3
Foodgrains	4.05	3.24	125.00
Other agriculture	5.11	4.25	120.24
Animal husbandry	6.18	5.54	111.55
Plantation	5.18	5.79	89.46
Forestry	6.16	5.35	115.14
Coal	11.97	9.39	127.48
Sugar and gur	5.16	3.69	139.84
Vegetable oils	5.30	4.51	117.52
Other food products	5.35	6.49	82.43
Cotton textiles	5.38	4.86	110.70
Other textiles	5.90	7.84	75.26
Miscellaneous textile products	6.37	7.51	84.82
Wood products	5.45	8.54	63.82
Paper and paper products	6.23	7.29	85.46
Rubber products	9.52	12.10	78.68
Plastics	10.19	7.63	133.55
Cosmetic and drugs	5.38	4.83	111.39
Man-made fibre	6.53	8.60	75.93
Batteries	7.64	9.65	79.17
Electric household goods	8.01	9.94	80.58
Radios	4.71	9.74	48.36
Motor vehicles	7.41	12.08	61.34
Watches and clocks	8.72	10.18	85.66
Other industries	10.34	8.29	124.73
Printing	6.39	7.38	96.59
Railways	6.65	7.40	89.86
Other services	6.44	7.26	88.71

Source : Data in Government of India, Planning Commission, Perspective Planning Division, "A Technical Note on the Approach to the Fifth Plan of India 1974-79" (New Delhi, 1973), Table 5 (Case 3A and Case 3B).

ed that the implications of redistribution for foodgrains demand, as estimated by the Planning Commission (and used by us as the basis of our analysis) represent an underestimate. According to an exercise undertaken recently, the yearly growth rate in demand for foodgrains, as estimated by the Planning Commission, represents an underestimate of at least 19.96 per cent.<sup>8</sup> This is in line with the results of the other studies relating to the implications of alternative assumptions regarding redistribution for the rate of growth of foodgrains demand and output.<sup>9</sup> This means that, if one gives even some weight to these results, it would be difficult to manage the extent of consumption redistribution considered by the Planning Commission with an average annual growth rate of only 4.05 per cent in foodgrains output (see Table 2, column 2). With the foodgrains sector being an important sector in the country's economy, and with the labour intensity in this sector being relatively high, the employ-

ment implications of the issue we have considered in this paragraph become quite obvious.

The other consideration relates to the employment effect which redistribution can be expected to have through its impact on the balance of payments. We may note here the observations made by Dudley Seers in this regard:

"In the first place, the import content of the consumption of the rich is high. It is true that imports of finished consumer goods are now severely limited (though contraband trade is not negligible). But there is a big import element in the local production (often just assembly) of consumer goods, especially for electrical appliances; to this, one should add foreign exchange flowing out in the forms of patent royalties and profit remittances. Expenditure by Colombian tourists abroad is also considerable — more in fact than the total of all purchases of imported consumer goods. (Tourism is also one of the main sources of contraband.) These various leakages considerably decrease the local demand for labour; from another point of view, they help to

explain the inadequacy of foreign exchange to cover all the capital goods and materials needed for the fast expansion of employment. Moreover, in as far as consumer expenditure does create demand for local resources, it is often for goods requiring capital, or types of professional and skilled labour which are in short supply."<sup>10</sup> (What is more, scarce administrative resources are absorbed in operating controls that attempt to prevent the conversion of high incomes into foreign exchange.)

Although these observations relate to Columbia, they are equally valid for our country. That the import content of the consumption of the rich in our country is relatively high is a fact. Estimates prepared by the Planning Commission bear this out: these estimates suggest that redistribution of consumption expenditure in favour of the poorer classes would reduce total imports of goods and services by Rs 218.5 crores during the Fifth Five-Year Plan period. But, as the Planning Commission itself has recognised, this figure:

"is likely to be an underestimate because of the level and type of aggregation adopted in the input-output table. In addition, we have not been able to distinguish between different types of construction. In view of the fact that some construction goes to meet the need of upper income brackets exclusively and is also highly demanding in terms of scarce resources such as cement, steel, etc, the total reduction in foreign exchange can be shown to be larger if more precise quantitative information could be obtained on the extent of such construction activity."

Indeed, a closer examination of the available data suggests that the saving in imports of goods and services due to reduction in consumption disparities would be several times larger than the Planning Commission estimates indicate. There are at least two considerations which support this view. First, the Planning Commission estimates were prepared before the steep increases in oil price took place. With the country spending considerable sums of foreign exchange on the import of oil<sup>12</sup> and with the consumption of oil by the rich in the country being relatively high, reduction in consumption disparities on the scale considered in this article would entail a substantial saving in foreign exchange.

And second, the country imports a good number of items which ultimately form part of the consumption of the rich. Imports of long-staple cotton is a case in point. Though these imports are allowed in the name of ex-



TABLE 3 : EMPLOYMENT IMPLICATIONS OF REDUCTION IN INEQUALITY IN EXPENDITURE DISTRIBUTION

Sector	Gross Value Added in Base Year (1973-74) at 1972-73 Factor Cost (Rs millions)	Average Annual Growth Rate of Gross Value Added (per cent)		Average Annual Growth Rate of Employment (per cent)		Difference between Column 5 and Column 6	Percentage Change in Average Annual Growth Rate of Employment due to Reduction in Inequality (Column 7 as Percentage of Column 6)
		With Reduction in Inequality	Without Reduction in Inequality	With Reduction in Inequality	Without Reduction in Inequality		
Agriculture	206,070	4.04	3.38	3.7064	3.1009	0.6055	19.5266
Mining	4,424	8.50	7.20	-0.1302	-0.1103	-0.0199	-18.0417
Manufacturing:	64,904	7.31	7.54	3.3804	3.2559	0.1245	3.8238
Food products	8,753	4.82	5.09	0.3458	0.3651	-0.0193	-5.2862
Textiles	14,170	4.44	4.47	0.8723	0.8782	-0.0059	-0.6718
Wood products	2,509	5.01	7.85	-0.0117	-0.0184	0.0067	36.4130
Paper and paper products	292	5.20	6.09	4.0945	4.7953	-0.7008	-14.6143
Leather products	425	5.92	6.20	5.4815	5.7407	-0.2592	-4.5151
Rubber products	592	9.10	11.56	12.6389	16.0556	-3.4167	-21.2804
Chemical products	7,903	10.22	9.83	5.5543	5.3424	0.2119	3.9664
Petroleum products	554	1.77	1.84	0.0779	0.0310	-0.0031	-3.8272
Non-metallic mineral products	6,658	7.68	7.85	0.1892	0.1933	-0.0041	-2.1211
Basic metals	5,703	9.24	9.46	4.5743	4.6832	-0.1089	-2.3253
Metal products	4,731	9.21	9.01	0.3375	0.3302	0.0073	2.2108
Non-electrical engineering products	3,428	10.27	10.31	11.2857	11.3297	-0.0440	-0.3884
Electrical engineering products	2,777	8.49	9.40	4.3316	4.7959	-0.4643	-9.6812
Transport equipment	3,602	9.47	11.01	0.5860	0.6813	-0.0953	-13.9880
Printing	677	5.44	6.28	5.0592	5.8404	-0.7812	-13.3758
Other industries	2,130	10.20	8.30	30.0000	24.4118	5.5882	22.8914
Electricity	5,110	9.52	9.91	5.8755	6.1173	-0.2408	-3.9364
Construction	25,330	8.10	8.48	1.7457	1.8276	-0.0819	-4.4813
Transport	19,900	5.85	6.39	2.8818	3.1478	-0.2660	-8.4503
Services	124,760	5.80	6.54	0.3463	0.3904	-0.0441	-11.2961
All Sectors	450,498	5.41	5.39	2.5692	2.3058	0.2634	11.4234

port promotion, the hard fact is that not even one-fifth of the cloth made of the imported long staple cotton is exported. The balance is consumed by the rich in the form of a large number of superfine cloth varieties.<sup>13</sup>

Then, the authorities allow imports of a number of items to cater to the needs and comforts of foreign tourists. While one can enter into a debate on the relationship between these imports and the earnings of foreign exchange from tourism, available data clearly show that foreigners do not constitute even half of the total number of five-star hotel guests in the country.<sup>14</sup> Available evidence also shows that while a good part of the milk supply in the country is used for products consumed by the rich (e.g. cheese, chocolates), foreign exchange is spent on the import of skimmed milk powder for meeting the shortfall in the procurement of raw milk for public distribution.

One also notices in the country a

strong tendency to go in for foreign financial and technical collaboration even for goods which generally cater to the requirements of the affluent minority. This involves a net outflow of scarce foreign exchange resources on account of a number of items. These items are: imports of raw materials, plant and machinery, spares, etc; remittances of royalties, dividends, interest charges, technical fees and head office expenses; and payments to foreign technicians in foreign currencies. Data are not available on the drain of foreign exchange resources on account of financial and/or technical collaboration in sectors catering to the requirements of the rich, but it is certain that the amount involved is not insignificant.

As regards the leakage of foreign exchange on account of smuggling and other such activities, available information suggests that the amount is fairly substantial. According to a rough estimate of the Ministry of Commerce,

Government of India, smuggling of art-silk yarn and fabrics alone works out to approximately Rs 200 crores per annum.<sup>15</sup> Smuggling of luxury goods on such a large-scale merely reflects the gross inequalities in the distribution of consumption expenditures in the country. With a dent on these inequalities a noticeable decline in smuggling should follow — thus making additional foreign exchange resources available for priority development activities.

It is evident then that substantial gains can be expected from the implementation of a development strategy which stresses the redistribution of consumption expenditure in favour of the poorer classes. If we go by the employment implications of such redistribution (as worked out earlier in this article) and make suitable adjustments on account of the underestimation of food-grains demand and output, it may be reasonably safe to say that the annual rate of growth of employment with re-



distribution would be higher by at least 15 per cent than that without redistribution. In more practical terms, this means that over 2.60 million additional gainful employment opportunities can be created in the country through reduction in poverty and inequality. Thus, assuming that an average household consists of five members, as many as 13 million additional people can be expected to benefit if the consumption redistribution objective of the Fifth Plan is achieved. To this should be added the gains resulting from (a) a decline in imports of goods and services demanded by the rich, (b) an increase in exports as a result of decline in domestic consumption of certain products which have a good demand in world markets, and (c) a reduction in the various foreign exchange leakages.

Having said this much, we may now consider two points. The first relates to the regional variations in the employment implications of a redistribution of consumption in favour of the poor. Although no study has been undertaken of these variations, it seems to us that, because of the regional differences in patterns of consumption, composition of output, employment coefficients etc, the employment implications of consumption redistribution may differ from region to region. Indeed, it is conceivable that, while for some states the favourable employment implications of redistribution may be well above the national average, in some other states redistribution might fail to have any noticeable impact on employment.

The second point is that, while the country has the capacity to realise the employment and other potentials which consumption redistribution in favour of the poor offers, the extent to which the potentials are actually realised will depend upon the measures the Central government and the various state governments in the country take (a) to mobilise the resources required for consumption redistribution,<sup>16</sup> (b) to effect the transfer of these resources to the poorer sections of the population, and (c) to ensure adequate output within the country of foodgrains and other items of essential consumption demanded by the people.

### Notes

[The article draws upon a study prepared recently by the author within the general framework of the WEP Income Distribution and Employment Programme. International Labour Office, Geneva.]

TABLE A

Case	Growth Rate (Per Cent) in 1978-79 over 1973-74 in		Inequality in Expenditure Distribution	Import Substitution
	GDP (at Factor Cost)	Total Commodity exports		
3A	5.5	7.0	without reduction	without import substitution
3B	5.5	7.0	without reduction	without import substitution
3C	5.5	7.0	without reduction	without import substitution
3D*	5.5	7.0	without reduction	without import substitution

Note: \* This is the preferred case adopted for the Fifth Plan.

- David Morawetz, 'Employment Implications of Industrialisation in Developing Countries: A Survey', *The Economic Journal*, Volume 84, September 1974.
- Ibid*, p 505.
- Includes cotton, jute, sugarcane, oilseeds, fruits, vegetables, etc.
- Includes steel furniture, cutlery, enamelling etc., type foundry, welding, safes and vaults, razor blades, hurricane lanterns, hand tools, miscellaneous metal fittings, sanitary metal fittings, and miscellaneous metal products.
- Includes transport services other than railway services.
- For a description of the differences between these variants, see Table A.
- Includes jewellery, mints, musical instruments, pens and pencils, fountain pens, button-making, ice, celluloid articles, brooms and brushes, game and sports goods, toy-making, packing of articles, bone and ivory products, slates, and other miscellaneous industrial products.
- Suresh D Tendulkar, 'Planning for Growth, Redistribution and Self-Reliance in the Fifth Five-Year Plan — II', *Economic and Political Weekly*, Volume IX, Number 3, January 19, 1974, Table 4.
- For a summary of these studies, see *ibid*, Table 2.
- "Income Distribution and Employment: A note on some Issues Raised by the Colombia Report", *IDS Bulletin*, Volume 2, Number 4, July 1970, pp 5-6.
- Government of India, Planning Commission, Perspective Planning Division, *op cit*, p 23.
- The Country's balance of payments position has been under severe strain as a result of the recent steep increases in oil price. The import bill for oil and oil products has increased from Rs 1,940 million in 1971-72 to Rs 12,450 million in 1975-76.
- According to the currently available data, as many as 1046 varieties of cloth are produced in India, with a large number of these being consumed by the rich.
- Number of foreign tourists opting for five-star hotels has gone down. More and more of them now prefer three-star hotels. The total number of guests in the hotels run by the Indian Tourism Development Corporation during 1973-74 was about 225,000. The number of foreigners who occupied the hotels was 109,382. (Information furnished by the Minister of State for tourism and Civil Aviation, Government of India, in response to a Lok Sabha question. See *The Times of India* and *The Financial Express* of August 3, 1974.)
- See *The Economic Times* (New Delhi), July 14, 1975.
- In our estimate the reduction in consumption inequality along the the lines considered in this article would entail a redistribution of the order of Rs 38,137.04 million (at 1971-72 prices). For details of this estimate, see Anand P Gupta, *Solving India's Employment Problem: Role of Fiscal Policy*, World Employment Programme Research, Income Distribution and Employment Programme Working Paper No 28 (Geneva: International Labour Office, 1975), Appendix Table V.

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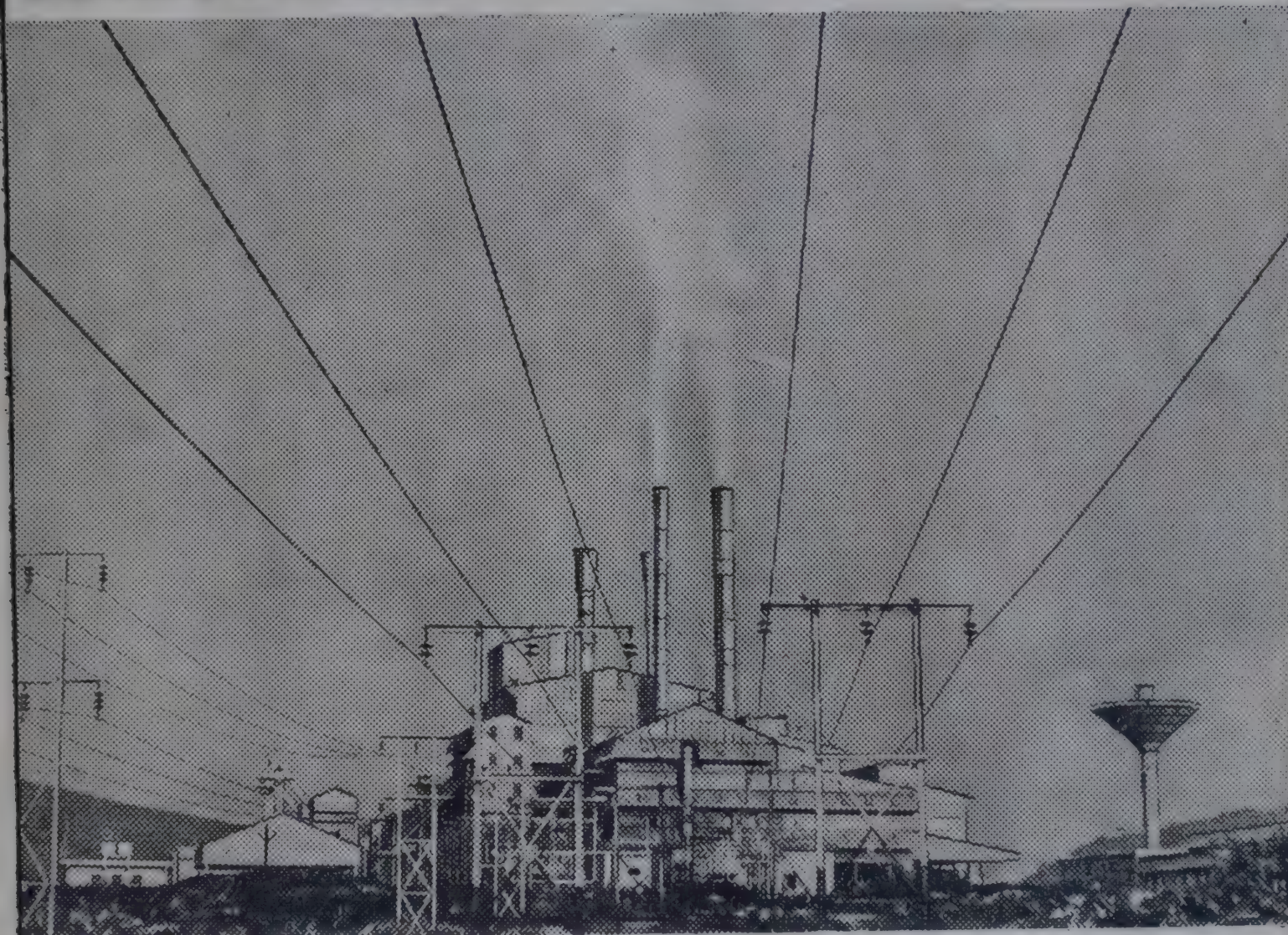
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**WEEKLY**

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Vol XI No 35

August 28, 1978

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**INDUSTRY: SPREADING SICKNESS**

**CEREMONY AND SOCIAL STRUCTURE IN PUNJAB**

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# ECONOMIC AND POLITICAL

# WEEKLY

Founder-Editor: Sachin Chaudhuri

Vol XI No 35 August 28, 1976

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## ECONOMIC AND POLITICAL WEEKLY

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# Induced Sickness

THE regular flow of cheerful tidings about increase in industrial production and improvement in capacity utilisation has not quite managed to cloak the anxiety over the growing number of industrial units which are, to use the accepted euphemism, falling 'sick'. Inevitably large numbers of workers are being thrown out of employment as a result or are having to lose a large part of their normal earnings. According to official statistics, nearly half a million workers had been laid off in the second half of last year. A more recent government press release on the state of industrial relations admitted that "there has been an increase in retrenchment and the number of lay-offs and closures especially in the textile, cement, sugar, engineering and jute industries".

The fate of these workers, though their number may be very large, may not today get much attention. However, the sickness of industrial units has also jeopardised large sums of money advanced by government financial institutions, including the nationalised banks. This does lend a certain urgency to the task of finding a solution to the problem. There is now much less enthusiasm in the government for take-over of floundering industrial units. The experience of most of the units taken over so far, especially the large number of textile mills, has shown that, by the time of government take-over, the erstwhile private managements have done almost all the siphoning off of funds that is possible, so that the scope for improving the fortunes of the units merely by putting an end to such malpractices after government take-over is very limited. And about the basic factors responsible for the units falling sick in the first place, government management can understandably do very little. For the same reason, the proposal at which, the government is now hopefully clutching, that other private sector companies should be 'allowed' to take over the sick units, is unlikely to achieve very much. In specific cases, though, it may enable the take-over, by some of the larger business groups, of a few plums among the sick units — for example, the Kamani Engineering Works in Bombay — of course, at the cost of handsome government subsidies in terms of taxes forgone, moratorium on servicing of existing loans and fresh finance on concessional terms. For the majority of the sick cotton and jute textile mills and units in the engineering and metallurgical industries, one may be sure, there will be no private sector Santa Clauses.

The remarkable thing about the government's attempts to cope with the problem of sick industrial units is that they altogether ignore the basic causes of the sickness. The present death-bed state of so many units in so many industries and, in some cases, of virtually all the units in an industry — for example, in the so-called mini-steel industry — has to be traced to the government's industrial policies, especially the many relaxations and liberalisations effected in industrial licensing policies in the last few years, and to the persistently low overall levels of investment in the economy since the mid-sixties. In the name of removing administrative delays, of inducing investment, of encouraging higher production, of enabling fuller utilisation of capacity, of export promotion, of development of backward areas, and so on and so forth, capacities very much in excess of demand — especially in the context of the low rates of overall investment and growth — have been created in a number of industries. The scores of mini-steel units which the government actively encouraged to be set up are an outstanding case in point. The Department of Industrial Development's own latest "Guidelines for Industries" is full of other similar instances. In the re-rolling industry, for example, it points out that capacity has gone up "as a result of modernisation and improvements effected by the existing units as well as the capacity created under the provisions of liberalised industrial licensing policy". As a result, today, "the main difficulty of the industry is with regard to marketing of its products. As against the estimated demand of about 30 lakh tonnes of bars, rods, etc, in 1978-79, the total capacity already available is nearly double this figure. Recent studies show that the demand may even be less". Similarly, in the steel structural fabrication industry, where capacity-utilisation has been less than one-third, the "Guidelines" points out that "there are at present 119 units in production with a total licensed/registered capacity of 452,000 tonnes per annum... In addition a number of schemes have been registered under the liberalised licensing policy". Spurred by the government and virtually fully financed out of government subsidies and funds provided by public financial institutions, industrial units have come up in the private and the so-called joint sector with scant regard for viability.



What is truly amazing is that while on the one hand the government fumbles with the problem of the growing number of sick units and even sick industries, there is no move to re-examine the industrial policies which have been directly responsible for the problem. On the country, there are almost weekly announcements of further liberalisation of, or exemptions from, licensing, of new schemes for automatic expansion of capacity and of further legitimising of illegally installed capacity.

## Groundnut Oil

### Up and Erratic

TO all appearances the groundnut oil situation seems to defy any rational explanation. After the steep fall in March when the record low price of Rs 37.50 per 10 kg was reached, prices began to pick up. In fact, they began to pick up rather rapidly, as the President of the Bombay Oil Seeds and Oil Exchange noted in his address to the 49th annual general meeting of the Exchange on April 30, and in a matter of days, they rose by as much as 30 per cent. The expectation was that the price of groundnut oil would stabilise at that level — between Rs 45 and Rs 50 for 10 kgs — till the onset of the monsoon. But that has not been the case, and the price has risen consistently, even steeply, during the past four months — from a record 'low' of Rs 3,750 per tonne in February to a hypothesised 'stable' of between Rs 4,500 to Rs 5,000 per tonne in May to more than Rs 6,500 per tonne in July.

The situation is indeed extraordinary. Even with a record crop of groundnuts this year — almost 7 million tonnes — the upward trend in the price of groundnut oil has not merely not shown any slackening, but has in fact been further accentuated by "shortages". The measures taken by the government to ease the situation include a widely-publicised ban on the export of HPS groundnuts imposed on July 14, a measure which is really meaningless since virtually all exports of HPS groundnuts take place between November and March, the period between April and October being the lean season for exports. Thus, the rise in prices of groundnut oil defy all conventional market explanations.

A clue can be had, though, if one bears in mind that over 25 per cent of the country's groundnut crop is produced in Gujarat, and the Saurashtra region accounts for most of it. The current uncertainties in the

groundnut oil situation began to make themselves most pronounced following the political developments in that state in the middle of March. In fact, the steep fall in groundnut prices in February, and the consequent dissatisfaction of the Saurashtra legislators (who formed the bulk of the KMLP representatives in the Gujarat Assembly) with the measures taken by the JF government to support groundnut prices was an important factor in the events that led to the fall of the JF Ministry. The Central government which had quite properly disapproved of the support price for groundnuts fixed by the JF government — at Rs 150 per quintal Rs 20 more than what was reportedly favoured by the Centre — obligingly followed the same policy following the imposition of President's rule.

It however looks as if the price paid has not been adequate; and neither the announcement that there had been no ban on the movement of groundnut oil from Gujarat to other states, nor the Gujarat government order further reducing the limit on stocking of groundnut by farmers from ten quintals to five quintals seems to have had any impact. According to one report, the Saurashtra Oil Producers had given an 'assurance' to the authorities that they would limit their despatch of groundnut oil to areas outside the state to 30 per cent of their output and retain the remaining 70 per cent within the state with a view to helping consumers in Gujarat during the coming lean months. Any modification of this stand by the groundnut lobby — which alone would have some positive impact on the price and availability of groundnut oil in the rest of the country — would probably depend on some political settlement being arrived at among various sections of Congressmen in Gujarat.

### Exports

#### Random Bounties

GOVERNMENT assistance for exports has gone up sharply in the last two or three years. This assistance takes many forms: excise and customs duty drawback, import replenishment, concessional interest rates on pre- and post-shipment credit, supply of raw materials at subsidised prices, as well as straightforward cash subsidies. The provision for the last-mentioned alone has gone up from Rs 72 crores in the 1974-75 budget to Rs 179 crores in the budget for the current year. There is, however, no official estimate of the total

assistance expended on exports in various forms.

Equally unclear are the bases on which the quantum of assistance for export of particular products is determined. On paper, the cash subsidy, for instance, is linked to the net foreign exchange earnings from the export of a product or, in other words, the difference between the net f o b realisation and the import content. In practice, however, this principle appears to be observed more in its breach.

Here again, facts are difficult to come by. A valuable source of information on how the cash assistance scheme for exports actually works is the report of the Comptroller and Auditor General for 1972-73. The CAG's report had brought out how the requirement to link the cash subsidy to the net foreign exchange-earning had been waived in the case of engineering goods, as a result of which the cash assistance had equalled or even exceeded the net foreign exchange earning from a number of products.

The same thing was done in the case of man-made fabrics. In its 178th report, the Public Accounts Committee of Lok Sabha has now brought to light further details about the operation of the cash assistance scheme for export of man-made fabrics. Cash assistance for man-made fabrics was related to the f o b value and not to net foreign exchange earned or f o b value minus import content. Not only that, the upper limit of 25 per cent for cash assistance too was waived and between March 1967, when the scheme was first introduced, and July 1971 the rates of assistance ranged from 10 per cent to 33 per cent on different varieties of man-made fabrics. Between 1968-69 and 1973-74, a total cash subsidy of Rs 11.82 crores was paid on exports of man-made fabrics of Rs 60.29 crores made through the State Trading Corporation.

Equally instructive is the PAC's finding that the rates of subsidy were fixed on no particular basis and that certainly no systematic cost study had preceded their determination. On this question a communication from the State Trading Corporation to the Ministry of Foreign Trade in March 1972, five years after the introduction of the scheme, reproduced in the PAC's report is revealing. The STC's lament runs as follows: "... we asked the industry a year ago to give us [cost] data... signed by their own chartered accountant. This, under one pretext or another, they have consistently evaded. The data they gave us was practically worthless. For instance, they have shown a loss of nearly 90 per cent in some instan-



ces. It is either incredible that anyone could have exported at such a loss or impractical that despite the assistance of 25 per cent we should be exporting something where there is a total loss of 90 per cent. Furthermore, the basis we wanted to adopt was the logical one of marginal costing, but this was also not acceptable to them. Instead they pleaded that we should reduce the incentive — and we did to 25 per cent — on the basis of haphazard figures furnished by them. Their whole behaviour in this matter leads to the unmistakable impression that with all the assistance they receive, including yarn at below international prices, even the 25 per cent is more than can be justified. This we wanted to test, but have received no co-operation from them."

Also noteworthy is the extraordinary concern shown by the then Ministry of Foreign Trade for the continuance of the export subsidy scheme for man-made fabrics. As the PAC report says, "The Committee learnt with consternation that despite the fact that even the limited data furnished by the Export Promotion Council, in July 1971, clearly indicated that the cash assistance hitherto sanctioned was far from justified, government decided, in a meeting with the Silk and Rayon Textiles Export Promotion Council on March 6, 1972, that cash assistance at the existing rates should continue for one year ...". In fact the scheme was later continued for another year and during these two years Rs 8.27 crores were paid as subsidy on exports of man-made fabrics effected through the State Trading Corporation. In 1973-74 especially, when it was known that the subsidy was proposed to be discontinued, there was a sudden spurt in exports and in the subsidy paid which justifiably rouses the PAC's suspicion. "Since such a phenomenal increase is something inexplicable and gives rise to suspicion that the scheme was perhaps exploited to their own advantage by unscrupulous exporters, the Committee desire that the reasons for this unprecedented spurt in exports and the payment of a large sum as cash assistance should be thoroughly probed..."

However, the case of man-made fabrics is only an instance of how export assistance schemes actually work. A probe, if there is any possibility of one at all, should really be into the larger question of the total burden of all the different forms of export assistance, their rationality and their justifiability in terms of the net earning of foreign exchange.

## Gujarat

### Agrarian Clashes

*A Correspondent writes :*

IT is good that, though after a delay of over eight weeks, the Governor of Gujarat has named the authority to conduct the probe into the clash between landless 'halis' and landlords and their armed 'farm guards' in Satem village in south Gujarat in June. Two halis had been killed and several others injured in the clash. The authority conducting the probe is also expected to suggest measures to prevent such clashes in future.

During the eight weeks or so since the murder of the two halis agitating for minimum wages in Satem, there have been quite a few other violent incidents in different parts of Gujarat. In Bardoli taluka of Surat district, also in south Gujarat, a clash between halis and landlords took place on July 30, in which a landlord resorted to firing. In the north-western region of the state there have been serious conflicts resulting in a number of deaths. On August 5, near Amreli, five persons were murdered — four of them burnt alive in a state transport bus which was set afire and one hacked to death while trying to escape from inside the bus. Again, on August 9, one more young man was axed to death near Amreli. On the same day, in nearby Junagadh district three 'kolis' were murdered, reportedly following a dispute over farm land.

Not much information is available about these incidents. The statements of the Governor and other officials do not throw much light on them, except to reiterate that the clashes, deaths, burning, axing and firings in the countryside have nothing to do with 'class conflict' but represent merely 'factional' clashes between 'groups' of people. What these reports do not explain, however, is why it is that such 'factional' clashes become particularly violent and frequent during the period when agricultural operations are at their peak.

The newspapers have not been particularly informative either. Many reporters seem to delight in semantic jugglery. A landless labourer who earns all his livelihood by working for others and a landlord who gets the substantial part of his work (or even all of it) done by hired hands are no different from them — both are merely 'agriculturists'. The armed toughs hired

at considerable expense by one group of 'agriculturists' are 'watchmen'. So the clashes are invariably described as being between two groups of 'agriculturists'. Such is their zeal to see only unity, despite all the evidence of diversity. Perhaps they can do even better. Thus a peasant who over a period of time has lost all his land and has become a landless labourer can be described as a 'former landlord'!

In the face of so much confusion, it is to be hoped that the district judge entrusted with the probe into the Satem clash will bring out not only the details of the particular incident but also uncover the underlying phenomenon of which the incident was only a part.

## China

### Afterquakes

JOURNALISM, especially of the speculative kind, has been for long the lone purveyor of romance in our times. This is still a fertile field for fairy tales, and occasionally, even for downright lies; and nowhere does this propensity for 'romancing' appear more clearly than in reports on events in China, especially when they pretend to be interpretative and analytic. The immense disaster that struck China last month in the form of a series of earthquakes in Tangshan and surrounding areas is a case in point. The 'afterquakes' that have followed the original shocks — and here one is not thinking of the actual afterquakes that continued for days together, but afterquakes of a rather different kind which were recorded in newspapers outside China — deserve to be noted.

Let us leave aside the most far-fetched speculations about the total number of the dead and wounded; clearly, what the Sinologists were most interested in was statistics — to wit, whether the Tangshan earthquake casualties exceeded those of the great earthquake of Shensi in 1556, and whether in fact the world was in for a new 'record'. But the way the Chinese people have been taken to task for refusing 'relief aid' from foreign countries, and the reasons suggested for this refusal, are most interesting. China, more than most countries of the third world, has reasons enough to know the real nature of foreign 'aid' and be wary of it; even the memory of foreign aid rendered by a fraternal socialist country after liberation is bitter. Moreover, accepting any kind



of foreign aid, no matter what the circumstances are, would be completely against the concept of self-reliance that has guided Chinese policy ever since the unilateral withdrawal of Soviet technicians following CCP's ideological differences with the CPSU.

Another curious speculation that has marked the comments on the earthquake is how the disaster has at last put the 'radicals' in the CCP in their proper place, and how the 'pragmatists' are once again in command. The distinction is very neat and precisely made. Thus, the composition of relief teams, the identities of those who saw off the relief team at Peking railway station as well as the identities of those who *didn't* see it off — everything has been grist to the mill of the speculative analyst. The point, of course, is that all such analyses begin with a blunder, in that they start with quite gratuitous distinctions between the 'radicals' and the 'pragmatists' in the CCP. According to the Sinologists, the word 'pragmatist' in Chinese eyes is almost a dirty word. But surely, no revolution, much less one of the range and comprehensiveness of China's, could have been made and sustained without pragmatism.

The confusion arises because bourgeois analysts, probably deliberately, confuse pragmatism with opportunism, and it is the latter that the CCP has most consistently eschewed, even when a temporary setback, either because of bad crops and food shortages or due to such natural disasters as the recent earthquakes, would make such opportunistic compromises appear most acceptable, even desirable. In fact, during the three major struggles that swept over China in the last decade — symbolised in the personalities and policies of Liu Shao-chi, Lin Piao and Teng Hsiao-ping — what was at stake was always the policy more than the personality; and it is now possible to identify each of those struggles with a specific, political line; each of the disgraced leaders, by all accounts, was in favour of an opportunistic compromise on the line of self-reliance — be it over the question of exporting Chinese crude oil and importing machinery with a view to increasing production, or of surreptitiously working for a dovetailing of the Chinese defence system with that of the Soviet Union, or of the ultimate supremacy of the masses, through the CCP, over the army and the bureaucracy.

It was Mao Tse-tung who said, almost aphoristically, that the wind will not cease to blow even if the trees

want to rest. The wind of class struggle, as also the struggle against those who advocate, in howsoever indirect a manner, subservience to and dependence on foreign aid, cannot cease, even or rather especially in the face of immense natural disasters like the Tangshan earthquakes. But to

understand such an attitude, one needs a perception rather different from the one which, probably quite seriously, wonders whether, in view of China's refusal to accept foreign assistance even in the face of such a gigantic disaster, the Chinese people are at all human.

## LETTER TO EDITOR

### Corporate Sector: Advantages of Size

WE write with reference to your correspondent's note on the above subject, which appeared on May 1. We are indeed happy that your correspondent has taken considerable interest in the studies on corporate finances published in the January 1976 issue of the Reserve Bank of India *Bulletin*. Some of his observations on the statistical aspects of the studies, however, call for certain clarifications, which we discuss below.

(1) The data source for the study on sole selling agency commission payments was, as stated in the article on the subject, the audited annual accounts of selected companies. As these documents do not disclose the names and addresses of sole selling agents, it was not possible to study the inter-connections of sole selling agents and company managements, although the importance of this aspect of sole selling agency arrangements was fully realised.

(2) The decision to present data for only two years in the articles on regular studies on company finances in the Reserve Bank of India *Bulletin* is linked with a proposal to publish an annual publication on corporate finances, bringing together at one place data for all categories of companies covered in the studies and for the entire period covered by each series in considerable detail.

(3) We can assure your correspondent that there is no "outright error" in the statement that all except one out of the 375 companies included in the study on large public limited companies for 1974-75 were among the 1,650 medium and large public limited companies covered in the study for 1973-74. We may also add that only 350 large companies included in the study on medium and large public limited companies for 1973-74 could be included in the large public limited companies' study for 1974-75, as the remaining 19 companies had to be ex-

cluded for various reasons such as non-receipt of accounts in time, amalgamation, etc. On the other hand, among the medium-sized public limited companies included in the 1973-74 study for which the 1974-75 accounts had been received, 24 companies were found to have moved up the paid-up capital scale during 1974-75 to merit classification as large companies and all of them were included in the 1974-75 study of large public limited companies.

(4) The differences between the growth rates and ratios shown by the 1973-74 and 1974-75 studies pertaining to large public limited companies have arisen on account of two factors, viz, (i) differences in the number and composition of the companies included in the two studies; and (ii) differences in concepts and definitions as between the two studies. Your correspondent has rightly taken note of the former. As regards the latter, we may clarify that since the publication of the 1973-74 study on large public limited companies, certain revisions in concepts and definitions, etc, were introduced, as part of our continuing programme of review and revision of the methodological and conceptual framework of the studies on corporate finances, with a view to improving the usefulness of the statistics. Profits, debt and current liabilities were among the items, the definitions of which were revised. The revised definitions of profits (operating profits, profits before tax, profits after tax and retained profits), were indicated in the article on 1,650 medium and large public limited companies for 1973-74, and those of current liabilities and debt, in the article on 375 large public limited companies for 1974-75, the first studies published after the respective revisions.

K P N NAIR

Department of Statistics,  
Reserve Bank of India, Bombay.



## Clippings

The external affairs minister, Mr Y B Chavan, today hailed the Colombo summit as a great success and said that on the "broader issues and fundamental aspects, the conference has succeeded in maintaining unity on the basis of the progressive content of non-alignment".

*The Times of India*, August 21

The Prime Minister, Mrs Indira Gandhi, has said: "We have successfully resisted efforts to weaken or disrupt our [non-aligned] movement" at the fifth summit conference.

*The Times of India*, August 23

Two Arab journalists (Mr Ziad Abdul Fatah and Miss Najla Sahyoun of the Waufa news agency) who attended the recently concluded Colombo summit, described it as the "weakest non-aligned conference held so far".

*Free Press Journal*, August 24

Mrs Sushila Rohatgi, deputy minister of finance, today commended in the Lok Sabha the work of the "Samachar" news agency — particularly the impact it had made at the non-aligned summit at Colombo.

*Hindustan Times*, August 21

A three-member delegation of the Committee of Youth Organisations of U S S R visited India from August 14 to 24 at the invitation of the Indian Youth Congress.

*Amrit Bazar Patrika*, August 25

West Bengal chief minister Siddhartha Sankar Ray has hailed the Indo-Soviet treaty as a "logical culmination and formalisation of a great and long-standing friendly relationship" existing between India and the Soviet Union.

*Patriot*, August 25

"I don't think we have any issue now which can mar Indo-US relationship", the US ambassador in India, Mr William Saxbe said in Calcutta on Tuesday.

*The Statesman*, August 25

Mr Bipin Pal Das, deputy minister for external affairs, today told the Rajya Sabha that the government was not aware of any anti-Indian propaganda by the Chinese in the recent past.

*The Times of India*, August 21

Industry circles in Calcutta have urged the Union government to allow private traders to transact business with China. Renewed Indo-China trade ties will help Indian entrepreneurs to explore a potential market like China and thereby augment foreign exchange earnings.

*Business Standard*, August 24

The All-India Manufacturers' Organisation (AIMO) was examining the possibility, within the framework of government policies, of organising high-level delegations to the neighbouring countries for renewal of contracts, establishment of trade relations and enlargement of trade with them.

*The Times of India*, August 22

The Union minister for law and company affairs, Mr H R Gokhale, to-

day introduced a bill in the Lok Sabha amending the act which imposes a total ban on donations by private companies to political parties. The reason given for amending the bill is that "experience has shown that the ban has not produced the desired result."

*The Times of India*, August 25

A meeting of the National Development Council is being convened here on September 16 and 17 to discuss the revised Fifth Plan, which has almost been finalised by the Planning Commission. . . . The financial provision in the revised plan would be lower. . . . Production targets for several key sectors, including foodgrains, coal and steel, have been reduced.

*Financial Express*, August 23

The West Bengal executive committee of the Communist Party of India claims that co-operation between Congressmen and the CPI on implementation of the 20-point programme "is growing in the state".

*The Statesman*, August 20

Parliament on Thursday passed a legislation amending the Maintenance of Internal Security Act (MISA) for the second time to extend its emergency provisions for another year. . . . During the debate which lasted a few hours, CPI leader Bhupesh Gupta and his party colleague Indradeep Sinha criticised the increasing number of arrests of CPI workers, including even some legislators, in several states.

*Patriot*, August 20

The Home minister today rejected the plea to set up "machinery" to examine the justification of detentions without trial under the emergency provisions of the Maintenance of Internal Security Act. . . . Mr Reddy wondered if the Communist Party of India, "after full-throated support" to MISA was now speaking against it only because some of its members had been detained under it.

*The Statesman*, August 20

Two unidentified Naxalites were killed in an encounter with the police yesterday morning near Vellatur village in Nalgondi district.

*Free Press Journal*, August 20

Sprightly hamlets today dot Naxalbari — one-time storm-centre of the extremists — as a testimony to the people's sense of belonging, fruited in course of the first year of the 20-point economic programme.

*Hindustan Times*, August 21

It is no part of the duty of a judge, nor is it a duty in the discharge of office of a judge to go and address a meeting on political matters to redress grievances of the people, the supreme court today ruled.

*The Times of India*, August 20

A law camp will be organised at Bhiwandi by the National Forum of Lawyers and Legal Aid on Sunday. The camp . . . will seek to explain to the poor the different facets of law. The chief minister of West Bengal, Mr S S Ray, a judge of the Supreme Court, Mr Justice P N Bhagwati,

Union minister of state for justice, Dr Syed Mohammed, Maharashtra's minister for law and justice, Mr B J Khatal, Mr Yashpal Kapur, MP, and Maharashtra's advocate-general, Mr Ram Rao Adik, will attend the camp. The BPCC president, Mr Rajni Patel, will preside.

*The Times of India*, August 20

The replacement of elective chairmen and vice-chairmen of the Bar Councils of India and the states by law officers has been proposed in a bill amending the advocates act introduced in the Lok Sabha today by the law minister, Mr H R Gokhale.

*The Times of India*, August 25

Five-star hotels in Bombay may arrange short programmes of Marathi songs (lavanis) as part of the entertainment for their guests, Mr Sushilkumar Shinde, Maharashtra's minister for social welfare hinted here [Pune] today. . . . Mr Shinde said he was making efforts to give an opening to tamasha artists in five-star hotels.

*The Times of India*, August 23

[Maharashtra] state urban development minister, Mr Rafiq Zakaria, said on Friday that there was absolutely no question of the government taking the stand that "there should be no further reclamation at Backbay".

*Free Press Journal*, August 21

Labourers will no longer be allowed to live in huts they build at or near their construction sites. A [Delhi] municipal corporation spokesman said on Saturday that Commissioner B R Tamta had ordered that construction labourers be housed only in tents. . . . The new measure, he said, will help maintain the beauty and cleanliness of the city.

*Patriot*, August 22

The Centre has advised the state governments to launch a pilot project in selected cities for night soil service on the model of Singapore. This follows the recommendation of the Committee set up by the works and housing ministry to examine the report of the Sivaram Committee on urban wastes. . . . Four members of the Committee, including the Chairman, had visited Thailand, Singapore, Japan, Hong Kong, and Philippines to study the methods adopted in these countries in disposal of urban wastes.

*The Hindu*, August 19

Hundred and one prizes were drawn for Delhi policemen, who had undergone sterilisation, at a family planning lottery organised in New Police Lines on Wednesday.

*Patriot*, August 19

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# Upward All Round

Hansavivek

**COLOUR-CHEM** intends to set up a second factory at Roha, an underdeveloped area of Maharashtra, because the existing factory at Thane is located within the Bombay Metropolitan Regional Development Plan area, where there may be severe restrictions on further expansion. The expansion and diversification projects, already approved, are being implemented at the present unit. As a result of research and development efforts, the company was able to add 15 new items to its range of licensed products. It is now engaged in standardisation of manufacturing processes for more new products and expects to start commercial exploitation of these processes soon. Both units of diketene plant have been in operation since August 1975; but one of these had to be kept idle periodically, owing to inadequate demand for the main diketene-based intermediates. The company has recovered about Rs 33 lakhs from

insurers in full settlement of its claim for the cost of restoration of the plant after the explosion and for loss of profit arising therefrom. During the year to March last, the company was able to take full advantage of favourable factors such as rise in demand for its products, improved availability of essential raw materials, and installation of captive power generators which mitigated the restrictive effect of the continuing power cut. It was able to step up production and sales. Gross profit was also higher, but margins came under pressure on account of rise in costs. The unchanged dividend of 12 per cent was covered nearly 2.3 times. The shareholders are also to be offered a gift of shares in the proportion 2:5, and the directors have recorded their intention to maintain the same rate of dividend on the expanded capital after the proposed bonus issue. The company's exports dropped from Rs 2.03 crores to Rs 1.2 crores,

whereas it spent Rs 4.46 crores in foreign currency by way of payments of royalty, knowhow and consumption of raw materials, components and spare parts, and remittance of dividends. As the total value of its assets is now in excess of Rs 20 crores, the company will have to register itself under the MRTTP Act. The company's turnover in the first three-and-a-half months of the current year has been 30 per cent ahead of the same period last year. The new chairman, D M Khatau, therefore looks forward to another year of good business and higher earnings, although his optimism is tempered by shortages which have surfaced only recently of the essential raw materials, ethylene oxide and naphthalene, and their derivatives. The company is setting up at its Thane unit, an effluent treatment plant for which it will receive advice and guidance from the German collaborators, Bayer and Hoechst.

**GWALIOR RAYON** experienced marked contraction of gross margins during 1975-76, although its sales were only a shade lower than the previous year's.

## The Week's Companies

(Rs in Lakhs)

	Colour-Chem		Gwalior Rayon		English Electric		Warner-Hindustan	
	Latest Year 31-3-76	Last Year 31-3-75	Latest Year 31-3-76	Last Year 31-3-75	Latest Year 31-3-76	Last Year 31-3-75	Latest Year 31-3-76	Last Year 31-3-75
Paid-up capital	481	412	1404	1404	225	225	157	157
Reserves	392	376	8223	7744	316	317	172	178
Borrowings	543	630	1286	482	—	—	24	191
of which Term borrowings	119	156	957	357	—	—	18	34
Gross fixed assets	1434	1217	11742	11050	308	287	331	325
Net fixed assets	848	728	7268	7114	123	116	162	173
Investments	—	—	194	104	1	1	—	—
Current liabilities	698	626	1888	1715	486	390	126	108
Current assets	1267	1317	5340	4128	899	812	317	461
Stocks	613	701	2199	2029	319	290	201	263
Book debts	650	613	1747	844	401	370	105	197
Net sales	2307	1889	13134	13660	1275	1204	822	781
Other income	31	62	313	196	85	93	10	13
Raw material costs	1096	932	7503	7611	522	516	385	322
Wages	198	193	1243	1235	321	309	123	113
Interest	121	110	122	100	—	—	14	22
Gross profit (+)/loss(—)	428	364	2182	3031	297	281	118	142
Depreciation provision	102	87	548	608	15	16	20	24
Tax provision	208	157	609	1637	175	175	62	74
Net profit (+)/loss(—)	118	120	1025	786	107	90	36	44
Development rebate provision	4	6	—	69	—	2	—	4
Transfer to reserves	63	65	782	558	53	34	6	25
Dividend								
Amount	P 2 E 49	— 49	P 32 E 211	32 127	P — E 54	— 54	P 1 E 29	1 14
Rate (per cent)	P 11 E 12	— 12	P 9.3 E 20	9.3 12	P — E 24	— 24	P 5 E 23	5 11
Cover (times)	2.28	2.33	4.70	5.40	1.98	1.63	1.21	2.39
Ratios (per cent)								
Gross profit/sales	18.55	19.27	16.61	22.19	23.38	23.34	14.35	18.44
Net profit/capital employed	8.33	8.46	9.39	8.16	19.78	16.60	10.20	8.36
Inventories/sales	26.57	37.11	16.52	14.85	24.23	24.08	24.45	33.67
Wages/sales	8.58	10.21	9.46	9.04	25.18	25.38	14.96	14.47



This outcome followed rise in cost of production. Net profit however was considerably higher and the dividend stepped up, from 12 per cent to 20 per cent, was covered 4.7 times. The offtake of staple fibre was affected by the sluggish trend in the textile industry and the company produced 63,500 tonnes, as against 71,800 tonnes previously. The slackness in the demand for staple fibre also affected production of rayon grade pulp, which was down from 95,500 tonnes to 88,600 tonnes. The company, however, was able to break new ground by manufacturing 17,000 tonnes of superior quality pulp suitable for the filament yarn industry — both at the Harihar and Mavoor plants. The mini-paper plant at Mavoor produced 2,400 tonnes of paper. Production of caustic soda was 46,500 tonnes, as against 42,300 tonnes in the previous year. The company received a 'letter of intent' for expanding the pulp manufacturing capacity at Harihar by further 12,000 tonnes of superior quality pulp suitable for the rayon filament and tyre cord industries. It is participating in the establishment of a caustic soda chlorine project with a capacity of 100 tonnes per day in association with Bihar State Industrial Development Corporation in a 'backward' district of Bihar. The project cost is estimated at Rs 1.60 crores. The company is also engaged in exploring the possibility of participating in a chemical complex to be set up at Malaysia to produce pulp, paper, cellulose fibres and caustic soda, which will open further avenues for export of plant and machinery by the engineering and development division. This division has supplied the entire staple fibre plant and machinery to South Korea and also successfully erected, installed and commissioned the plant there. The company's joint venture project, in Thailand, for manufacture of staple fibre is to go into production shortly.

**ENGLISH ELECTRIC COMPANY OF INDIA's** results are satisfactory, with higher sales and earnings. The company has fared better than the engineering industry in general, though demand for some of its products slowed down appreciably. In fact, the results could have been better still, but for disturbed labour conditions at the Madras unit during the first half of the year. Equity dividend of 24 per cent is being repeated and is covered nearly twice by earnings. The company looks forward to further growth in the future. It has received a 'letter of intent' for

manufacture of some new items of electronic test equipment and is awaiting industrial licences. The management is discussing with government the terms on which collaboration with the UK collaborators, which expired in May last, can be extended in the areas considered essential. The company has planned manufacture of high rupturing capacity fuses for rectifier and thyristor protection as well as 12 kv high voltage fuses. The introduction of these products will enable imports to be reduced. EEC has also extended its range of air circuit breakers to include 2,000 and 3,000 amps. Its research and diversification facilities have been accorded recognition for further three years. J Roper-Evans, who was appointed additional director in March last, has also been appointed managing director for five years. The company's earnings in foreign exchange amounted to Rs 104 lakhs and its expenditure in foreign currency aggregated Rs 71 lakhs by way of royalty, technical drawings, consumption of raw materials, spare parts and components, and dividend remittance.

**WARNER-HINDUSTAN** reports a decline in earnings despite higher sales, but is stepping up dividend from 11 per cent to 23 per cent, which has a thin cover. The directors ascribe deterioration of margins to rise in costs of inputs and complain that the pre-tax profit on pharmaceuticals has continued below 15 per cent of sales turnover. Sales of pharmaceuticals recorded good growth, but those of chemicals were adversely affected by the availability of large quantities of imported beta and gamma picolines at lower rates in the market. The company's exports amounted to Rs 26 lakhs, of which exports of chiclets chewing gum and gum base amounted to Rs 15 lakhs.

**BASANT PAPER MILLS** is setting up a Rs 3-crore project at Basantnagar near Varanasi, in UP, for annual manufacture of 6,000 tonnes of machine glazed and sackcraft paper. The company has locational advantage, since the major raw materials for production of these varieties of paper are agricultural residues, viz, rice straw, hemp, etc, which are available in abundant quantities in the area surrounding the plant. It has also the advantage of cheap labour, as no significant industrialisation has yet taken place in this area. A part of the plant and machinery has already arrived at the site and is being installed. The company expects to commence commercial production by the

end of this year. The project is proposed to be financed by long-term loans, of Rs 1.80 crores, from financial institutions and by share capital, of Rs 1.20 crores. The promoters have already contributed Rs 42 lakhs towards equity share capital. The company is entering the market with a public issue of 6,30,000 equity shares of Rs 10 each and 15,000 (11 per cent) redeemable cumulative preference shares of Rs 100 each on September 7. According to N L Dalmia, managing director, the company has already planned for expansion of capacity. He hopes that the capacity will be increased to about 15,000 tonnes in the course of the next two or three years.

**SHRIRAM FIBRES'** plant was established during the period when general inflationary conditions prevailed in the country and abroad, and thus resulted in higher project cost and increased interest burden — compared to other units which had been established much earlier. The company has approached government for relief in excise duty, so that it can compete with other units which were established under more favourable conditions. The plant went into commercial production in April 1975, amidst unfavourable market conditions on account of the recession in the tyre industry, so that the company could produce during the year ended March 1976 only 1,052 tonnes of nylon tyre yarn as against the installed capacity of 3,000 tonnes. Turnover was Rs 1.41 crores and, after providing Rs 76 lakhs for depreciation, there was a loss of Rs 1.53 crores. The company could not provide for statutory development rebate reserve to the extent of Rs 79 lakhs. Production had to be suspended last year on account of accumulation of unsold stocks, but the factory has since resumed working. Market trends appear to be improving and the directors hope that the plant will be able to achieve better utilisation of capacity in the current year. The company had conferred on IFCI, LIC and UTI an option to convert a part of the additional financial assistance provided by them into equity capital. The right of conversion was to be exercised by IFCI and UTI during the period from April 1, 1976 to March 31, 1978 and by LIC during October 1, 1978 to September 30, 1980. At the instance of the financial institutions, the company is now modifying the period of conversion for IFCI and UTI, also, to one from October 1, 1978 to September 30, 1980.



NEW DELHI

## Spreading Sickness

B M

WITH their number growing relentlessly, closed and sick industrial units are posing a complex problem for the government. It is no longer a case of a few units falling sick which the government could deal with under the Industrial Development and Regulation Act. Entire sections of industry are now tending to fall sick. Large segments of certain industries — such as cotton textiles, jute, engineering, sugar, tea, and so on — are now admitted to be on the official 'sick' list. It is, therefore, no longer possible to cope with the problem through the conventional device of take-over of the sick units by the government. The Commerce Minister, D P Chattopadhyaya, said in Rajya Sabha the other day that if all the industrial units which fall sick or are made sick were to be taken over by the government, in course of time the government would be saddled with only sick units in the public sector. The government will then have on its hands 'a sick sector' while the healthy units remain in the private sector.

Experience with the running of sick units, in particular the large number of textile mills taken over by the government, has not turned out to be very encouraging. Chattopadhyaya admitted as much when he disclosed in the Rajya Sabha that the textile mills taken over by the government were not in a position to sell their products and their stock position was becoming "more and more serious". The National Textile Corporation is still losing over rupees two crores per month.

The government is, therefore, exploring alternative solutions. A committee of senior officials headed by the Finance Secretary was appointed some time ago to go into the problem. It has submitted its report and the government is now in the process of taking decisions on the basis of the report. The solutions being considered are indeed of a far-reaching nature.

The first serious issue to be faced is how to safeguard the funds of the banks and the public financial institutions which are sunk in the closed and sick units. It is estimated that over Rs 1,000 crores advanced by banks and financial institutions are in

danger of being lost as 'bad debts'. It was suggested at one time that legal powers should be created for the recovery of loans to industry such as apply to the realisation of land revenue. But this idea was presumably dropped on the ground that it was inconsistent with the objective of reviving the sick units which required additional financial support rather than action to recover past loans.

It has been proposed that in view of their large stakes, banks and financial institutions should assume the responsibility for close surveillance of the working of industrial units and intervene before they get too sick. But that is for the future and it is yet to be seen what can be achieved by way of such preventive action. Right now the stress is on reopening the closed units and nursing them back to health. This is sought to be done by easing the financial strain on these units and by generous pumping of more funds into them. In the case of sick units taken over by the government, the practice has been to freeze or defer the clearance of liabilities. This practice is now proposed to be extended to all sick units, once they are officially recognised as such, even before take-over by government. Sick units will also be allowed to defer clearance of their backlog of taxes, power charges, etc. Once this is done, it is believed, pumping in of more funds would be more helpful in reviving the sick units. The government will also stand guarantees for the loans advanced by commercial banks for the revival of sick units. The restructured IDBI will be the principal agency for the 'operation revival'. Its chairman has announc-

ed his intention to open a new 'window' for advancing funds to sick units. The government is expected to make available to the IDBI as much as Rs 300 crores for this purpose.

But far more significant is the proposal that instead of government taking over sick units there should be a merger of sick units with healthy units. The merger idea, it appears, will apply even to such units as have already been taken over by the government. This is regarded as one way of running the units taken over "economically". How exactly the merger idea will be implemented is still not quite clear and is apparently being worked out in detail. One of the issues to be settled in the case of the sick units already taken over, but which have not yet been nationalised, is whether these units would be returned to the original owners with the stipulation that they be merged with healthy units or placed under the management care of healthy units. Alternatively, the government might itself transfer management control over such units to other interests in the private sector running healthy units. It is not yet clear what compensation will be given to healthy units for shouldering the burden of the sick units.

As for sick units, or units about to fall sick, which have not been taken over by the government under the Industrial Development and Regulation Act, an idea that has been mooted is that a legal obligation be placed on viable units to run these units, especially if they fall under common ownership. There should be, it is suggested, an interchange of finance and management between healthy and sick units in order to give "blood transfusion" to the sick units. This should be done especially in cases where an industrialist or an industrial group owns more than one unit and one of the units falls sick.

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The implications of the merger scheme may turn out to be significant and may result in structural changes in the industrial scene. In a period of depression, when an industrial unit begins to make losses or has to be shut down, the normal working of market forces, if allowed free play, will itself result in its take-over by other interests in the field, if they find it worth their while. If, however, a legal obligation is placed on viable units to run sick units at a loss or to take them over at an artificially high value it may amount to spreading sickness all around. It is true that the sickness of many units can be attributed to mismanagement or to their being starved of investment for renovation and modernisation as a result of the draining away of their surpluses to more profitable areas by their owners. But a reversal of this process, far from curing the malady, may only aggravate and spread it.

Official spokesmen are very much worried about "out-dated family management" in the private sector which is held responsible for the woes of Indian industry and the current epidemic of sickness. The panacea offered is replacement of family management by professional management. The merger of sick units with healthy units is expected to result in professionalising management in industry. But there are others who caution that the merger scheme may only result in bigger industrial houses swallowing smaller, independent entrepreneurs facing difficulties. This may happen in the normal course, but a scheme under which this will be promoted with the blessings of the government and with funds provided by public sector financial institutions is quite a different matter. But the objective of dispersing industries and reducing concentration of economic power is now rated very low in the order of priorities, given the need to utilise all established capacities and raising production at all costs.

The fact has to be reckoned with, however, that Indian industry has been habituated to operating in a sheltered market under a system of generous subsidies. The drive for profit maximisation and quick returns has resulted in the evolution of an industrial structure which rests on a narrow base of elitist consumption demand. Any shrinkage of this effective demand, such as has come about in the wake of the latest bout of inflation, precipitates a crisis. This is at the root of

the problem of sickness in industry. An effective solution to this problem cannot obviously be found in the present desperate attempts to revive all or most of the closed and sick mills. Unless there is a well-conceived plan for restructuring industry and adjusting the investment and production pattern in tune with the demand for mass consumption, present and future, Indian industry will not get over its sickness. Industrial enterprise, moreover, should not be treated as a one-way street, with rewards only. Those who bring their units to ruin must suffer the consequences and it is none of the responsibility of government and society to provide artificial props to them and to squander resources on keeping such units alive.

The present preoccupation with reviving sick units is indeed assuming grotesque forms in some quarters. The report of the special bipartite committee of the National Apex Body of employers' and workers' organisations on lay-off, retrenchment and closure is a case in point. The committee was supposed to go into specific cases and recommend appropriate action where it found that lay-off, retrenchment or

closure was not bonafide. But it did nothing of the kind and merely joined the chorus for special concessions and assistance to revive sick units. In discussing the problems of some of the units in the sick category, it goes so far as to seriously argue in favour of special safeguards for units in the organised sector against competition from the small-scale sector. This is done in the name of protecting the personnel and investment in these units. It did not apparently occur to the committee, including the trade union representatives on it, that in the normal course it is the small-scale sector which needs protection against being swallowed by the bigger, organised sector and that those engaged in the small sector for their livelihood are far more numerous and needy than those employed in the organised sector. It is indeed strange that special assistance should be demanded when a unit in the organised sector is not efficient enough to stand competition from even the small-scale sector.

The danger is that concern for revival of sick units will only further erode the spirit of competition and entrepreneurship in industry.

## NORTH

### New Life through Habitat

WITH the creation on August 25 of the new Department of Habitat in the state, Punjab has scored another 'first' in the country. Chief Minister Zail Singh is to hold overall charge of the department. It is expected that this would ensure co-ordination among the various branches of the administration involved in implementing the unique Habitat project. The Minister in charge is Gurbinder Kaur Brar, Housing Minister, and the departmental head is the Secretary for Local Government. The Chief Minister addressed a meeting of the State Co-ordination Committee for the development of Habitat villages in Punjab on August 22. Three weeks earlier, Sanjay Gandhi had launched the Habitat movement in Punjab. In his address, the Chief Minister said the state "must show the way to the entire country". Eighteen villages have been selected for development under this scheme — one from each district of the state — plus six other backward villages.

A working group of experts was recently set up to ensure proper and speedy development of these villages. The group has been drawing up a

detailed plan, with a budget and a time-schedule, so as to fix a deadline for the completion of the development schemes. Instructions have been issued by the state Finance Minister to the various departments to provide funds for the Habitat villages — "out of savings in their existing annual budgets". Additional funds have also been promised, wherever necessary, so that the development of these 18 villages is not slowed down for shortage of funds.

This is considered an inter-disciplinary project. Co-operation of various official and non-official agencies — apart from the active interest of villages — is therefore thought indispensable. Actively associating himself with the movement, Punjab Governor M M Chaudhary told the Co-ordination Committee for the Development of Habitat villages on August 22 that provision of a physical infrastructure by the government is not enough to ensure integrated rural development. These villages must become fully viable economic units. Fullest support and involvement of the people is essential for this purpose.



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Gandhi Marg Society, a non-official organisation, has been actively associated with the Habitat movement. In other ways too, efforts are being made to involve people in this. Thus both the governor and the Chief Minister have emphasised that those who co-ordinate the activities of the government departments and the non-official agencies should be able to explain the Habitat concept and programme to the villagers in the idiom they understand. The programme drawn up by the state authorities in this connection includes provision of link roads, transport facilities, drainage, education amenities, public health, and a social and cultural infrastructure. To improve the standard of living, an organised effort is being made to supplement the average villager's earnings — especially of the landless households. Bank loans and institutional finance are being arranged to help the people in starting poultry, piggery, and dairy schemes and to assist in housing

schemes.

Channana, MP, convener of Habitat-India, who has visited Punjab twice in this connection and has attended the Co-ordination Committee meeting of August 22 (of which he is the vice-president), explained that each Habitat village would have a workshop where the people would be taught various trades. Indeed, several items in the all-too-familiar rural reconstruction programmes have been included in the Habitat scheme. "In the context of the population explosion and connected problems of environmental pollution, social degradation and health hazards, it has become necessary to make life in the rural areas physically, socially and culturally attractive and economically viable." Thus the country's first Habitat village is Gulabgarh, in Bhatinda district of Punjab, where the movement was launched on August 1, and which is expected to become the symbol of yet another type of rural revolution.

Rhodesia, the non-aligned had to fight against the politics of pressure and domination by new forms of colonialism. The Political Declaration of the summit dwells at length upon these problems facing the non-aligned, and what they could do to achieve an economic and political order based on the principles of self-determination, justice, equality and peaceful co-existence. The biggest force opposing the attainment of that objective was imperialism, the leadership of which was with the United States. The Political Declaration mentions US imperialism in 12 places: in welcoming the victories over it in Indochina; and in deploring its support to racist regimes and to Israel, its blocking the condemnation of or sanctions against Israel in the UN, its aggression against Kampuchea and Vietnam, its subjugation of Latin America to its imperialist domination, its threats and new aggressions against Cuba and its imposition of a blockade against it, its manoeuvres to perpetuate Puerto Rico's colonial status, its military bases in Latin America and in Diego Garcia and its abuse of veto power in the Security Council on the question of admission of Angola and Vietnam to the UN.

## COLOMBO

### A Placid Affair

Harish Chandola

WHAT is non-alignment? Who are the non-aligned? At the end of the Second World War, the choice for the newly-independent countries was not between joining one bloc or the other. It was between imperialism and freedom. Imperialism was offering its protective umbrella of military alliances all over the world in the shape of NATO, CENTO, SEATO, ANZUS, etc, while the Warsaw Pact was a closed-door shop for all but the communist countries of eastern Europe. So the choice for the newly-free countries was either to accept alliance with imperialism or safeguard and maintain their independence. They chose independence and freedom and to safeguard it, the non-aligned movement was born.

There have been some significant changes in the international political situation between the fourth summit conference of the non-aligned countries in Algiers in August 1973 and the fifth one which recently concluded in Colombo. Various liberation struggles to which the fourth summit had pledged its support, like those of Angola, Sao Tome and Principe, Guinea-Bissau, Cape Verde and Mozambique, have triumphed bringing an end to Portuguese colonialism. In

Asia, the struggles of the peoples of Democratic Kampuchea, Lao People's Democratic Republic and Socialist Republic of Vietnam against US aggression have resulted in great victories. The old concept of an international order, based on power blocs, balance of power, and spheres of influence, has been rejected by many countries as being inconsistent with the true independence and democratisation of international relations. In the economic field too, some measures have been taken by the developing countries to safeguard and control their natural resources.

But these positive developments notwithstanding, the Colombo summit felt that the "imperialists continued in their attempts to devise new methods designed to perpetuate their domination and exploitation of peoples". Although colonialism, as traditionally understood, was coming to an end, the problem of imperialism continued and could be "expected to continue for the foreseeable future under the guise of neo-colonialism and hegemonic relations". The struggle of the non-aligned countries had therefore entered a new phase. Besides struggling against racist regimes in Israel, South Africa and

A development of major significance in the non-aligned movement has been the growing identification of Africa as a whole with non-alignment. This has given numerical strength to the movement and has made it a powerful force in the UN. Africa has strengthened the anti-colonial and anti-racist content of the movement. Being a continent with the largest number of least developed countries, it has also given the movement the impetus to its demand for a New International Economic Order. The complete emancipation of Africa, the ending of racial discrimination against people of African origin all over the world, the protection of Africa from the rivalries of external powers, its de-nuclearisation and its social and economic development are now among the most urgent issues facing the world. The conference felt that the regimes in Israel, South Africa and Rhodesia established by alien colonial settlers formed a racist axis aimed at the elimination of the liberation movements in Southern Africa and Palestine.

On Southern Africa the conference reaffirmed its support for an intensification of the armed struggle against the forces of colonialism and apartheid



and called upon the member States to increase practical support to the liberation movements in Rhodesia, Namibia and South Africa. It congratulated the government and people of Angola on their heroic and victorious struggle against the South African invaders and their allies, commended Cuba, and other countries which assisted the people of Angola, and denounced the continuing campaign of defamation and hostile acts against it. The conference reaffirmed that the policy of Apartheid, declared illegitimate by the UN, was an international crime. It demanded the immediate release of all opponents of the racist regime detained under the notorious Terrorism and State Security Acts. It condemned the recent deal concluded by the French Government to provide nuclear reactors to South Africa, and the recent decision of France to sell submarines and of Israel to sell missile-equipped Corvettes to South Africa. It called upon member states to impose sanctions, including an oil embargo, against France and Israel for persistently violating the UN resolutions against the supply of arms to South Africa. It praised the support to the cause of liberation in Southern Africa by non-aligned and socialist countries as well as the Nordic countries and the Netherlands and deplored that France, Western Germany, Britain and the US continued to give moral, military and economic support to the racist regime.

In Asia, the conference affirmed the right of the people of East Timor to self-determination. Laos sought to counter the Association of South East Asian Nations' (ASEAN) proposal for the establishment of a zone of peace, freedom, and neutrality in that region with a brief description of the new situation in southeast Asia, which, it said, had turned in favour of the forces of peace, national independence, democracy and social progress. Laos wanted the conference to express its deep disquiet at the US actions in seeking to maintain its military forces in southeast Asia to pursue its neocolonialist aims, and to voice its support for the legitimate struggle of the peoples of the region against neocolonialism. There was a conflict between the ASEAN draft submitted by Malaysia and the Laos draft. A number of countries supported the Laotian draft. But because of lack of time no consensus could be arrived at and both the drafts were referred to the Co-ordinating Bureau of the conference for finalisation.

The conference also called for the

withdrawal of all foreign troops from South Korea, the closure of foreign military bases and the termination of the "United Nations Command", and the replacement of the Korean Military Armistice Agreement by a durable peace agreement. It supported the struggle of the people of North and South Korea to reunify their country peacefully and without outside interference on the basis of the three principles of reunification stipulated in the North-South Joint Statement of July 4, 1972. It called for convening a conference on the Indian Ocean as soon as possible to adopt measures for the implementation of the Declaration of the Indian Ocean as a Zone of Peace.

The conference endorsed the UN Resolution, passed in its 30th session, which declared that Zionism was a form of racism and racial discrimination. It denounced the growing military, political and economic collaboration between the South African racist regime and Israel. The conference called for all-out support, to the Palestine people, under the leadership of the Palestine Liberation Organisation, in their struggle against Israeli aggression.

The conference expressed satisfaction over the increasing participation of Latin America in the non-aligned movement. It said Latin America was one of the areas "that had suffered most intensely from the aggression of colonialism and US imperialism". It demanded that the US Government halt all political and repressive manoeuvres that tend to perpetuate Puerto Rico's colonial status and asked the member countries to offer their solidarity and support to the Puerto Rican people in achieving independence. The conference stated that the presence of US military bases in Cuba, Panama and Puerto Rico represented a threat to the peace and security of the region and demanded restoration to these countries the inalienable parts of their territories occupied against their will. It demanded the restoration of the sovereignty over Guantanamo, the Panama Canal Zone and the Malvinas respectively to Cuba, Panama and Argentina who were the rightful owners of those territories.

The struggle for political and economic independence naturally implies basic changes in the international division of labour. Overcoming the resistance by the developed countries to these struggles for a new economic order has become the primary task of the developing countries. The foreign exchange earnings of the developing

countries are basically derived from their exports of raw materials and primary commodities. The relative improvement of the level of prices of some of these commodities in 1973-74, which was short-lived, did not at all compensate for the overall deterioration in their terms of trade with the developed countries. There has been a phenomenal rise in the deficit in the balance of payments of developing countries, from \$ 12.2 billion in 1973 to \$ 35.5 billion in 1974 and over \$ 40 billion in 1975. Most developing countries have accumulated large external debts, a good portion of which carries heavy interests and amortisation obligations. It has been estimated that the external indebtedness of these countries which was over \$ 100 billion in 1973 will double itself by the end of 1976. The continuing diversion of human and material resources to unproductive and wasteful arms race, only heightens this grave crisis. The flow of financial resources to the developing countries in 1975 amounted to only about \$ 20 billion in contrast to the expenditure on armaments that has now reached the staggering figure of \$ 300 billion per annum.

In order to remove these inequities, the Colombo summit demanded a fundamental restructuring of the entire apparatus of international trade with a view to indexation, improving the terms of trade of developing countries and ensuring fair and remunerative prices in real terms to primary export products and an appropriate share of world trade for developing countries through the expansion of processing, diversification and full participation in transport, marketing and distribution of their products. It also stressed the need for basic restructuring of world production on the basis of a new international division of labour through improved access to markets of the developed countries for the manufactured products of developing countries, transfer of appropriate technology on favourable terms, redeployment of suitable industries from developed countries to developing countries, the elimination of restrictive business practices and effective control of the activities of transnational corporations. Radical overhauling of the present international monetary arrangements was sought and it was stated that a new system should be established which would remove the dominant role of international currencies in international reserves, ensure parity in decision-making as between developed and developing countries, and forge a link bet-



ween creation of liquidity and development finance.

The conference felt that only a confident spirit of collective self-reliance on the part of developing countries could guarantee the emergence of the New International Economic Order. Self-reliance implied a firm determination on the part of developing countries to secure their legitimate economic rights in international dealings through the use of their collective bargaining strength. It meant willingness to explore and pursue the im-

mense possibilities of co-operation among themselves in financial, technical, trade, industrial and other fields. The conference adopted an Action Programme on economic co-operation in raw materials, trade, monetary and financial matters, industrialisation, food and agriculture, fisheries, transport, telecommunication, insurance, public enterprises, health, technical co-operation and consultancy services, research and information system, private foreign investment, nuclear energy and international co-operation.

should be viewed in this context, as West Germany became the principal Israeli supporter. West Germany furnished Israel with a wide assortment of military hardware and economic aid under the Reparations Agreement of 1952. Besides this France too was active, constantly keeping Israeli armaments modernised and using Israel to crush national liberation movements in many French-speaking African States.

In June 1967 there was yet another attempt by Israel, in collusion with Western imperialism, to overthrow the regimes in Egypt and Syria, to paralyse the general Arab nationalist movements and strengthen the position of imperialism in the Arab countries and relegate the rights of the Palestinian people. In return for these services, Israel was allowed to retain the occupied territories. Even the results of the 1973 October War have not changed Israeli intransigency. Events have shown that the coalition of imperialism and Zionism does not have any interest in a fair settlement of the conflict. These parties are trying to block every constructive effort toward a settlement, and do all they can to keep the conflict alive. The main purpose of the alliance, however, is to strike at the Palestinians, deny them their rights, expand Israeli territory at the expense of the Arab countries, and destroy Arab liberation movements. With the Sinai Agreement of September 1975, this alliance has disrupted Arab unity, sowing discord among the Arab states, subjecting each to pressure and blackmail and burying the Palestine question. Further, with the seemingly unending crisis in Lebanon, the Arabs have been submerged in their own problems. Now Israel and the Western imperialist powers can depend on the services of most of the reactionary regimes in the Arab world. Today the main enemies of the Arabs are the reactionary Arab regimes which have made a secret deal with the imperialist-Zionist alliance.

Of late, Israel, at the behest of Western imperialism has come out openly in support of the racist regime in South Africa. The recent military deal between the two countries should be an eye-opener for those Arab regimes which see no threat from Israel. What the imperialists and Zionists have in common is deep antipathy for national liberation movements everywhere. Western imperialism, forced to retreat everywhere, has got a new lease of life in the Arab world, and the responsibility for this lies with reactionary Arab regimes which dread any change that might affect their interests.

## WEST ASIA

# Reactionary Regimes, the Main Enemy

Surendra Bhutani

THE external setting of Israeli's foreign policy has been unique during the 28 years period of its existence. The relations between Israel and the Western imperialist powers are also in a class by themselves. Israel came into existence with the help of these imperialist powers, and its survival depends, to a large extent, on a consensus among them and on the mercy of the United States. Since the end of Second World War, the Western imperialists, led by the United States, have been motivated in formulating their policy in West Asia by their global anti-Soviet strategy, and their wish to exploit the natural resources, especially oil, in the area. This brought the United States into conflict with the Arab nationalist movements; and it was to contain these potentially revolutionary nationalist movements in the Afro-Arab countries and protect its economic interests that Israel was established in collusion with US imperialism.

Here it will be appropriate to recall that Zionist ideology has been founded on three basic principles: the existence of a Jewish extra-territorial nation, the immorality of anti-Semitism, and Jewish concentration in one country as a solution to the problem of the persecution of the Jews. Thus Israel is a settler colony which, to fulfil the goals of its Zionist founders and leaders, has to, of necessity, come into conflict with the indigenous Palestinian population. At the same time, Israel benefits from unique privileges. It enjoys an influx of material resources of unparalleled quantity and quality from all sides. Israel is financed by Western imperialism without being economically exploited by it. Even the special US


envoy to Lebanon, Dean Brown, has said that Israel is economically unviable. Western imperialism uses Israel for its political purposes and pays for this by economic support.

There have been three broad phases in Israel's collusion with the Western imperialism: 1948-1956, 1957-1967 and post-1967. During the first phase, Israel had three main objectives: (a) to obtain ratification of the territorial *status quo* (as it had occupied more Arab territory than what had been allotted by the UN's partition plan); (b) to obtain foreign aid for economic development; and (c) to encourage Jewish immigration. Consistent with these objectives, Israel has been the watchdog of Western imperialism in West Asia; its function has been to commit aggression against those Arab states that might even remotely threaten imperialist interests. This was most evident in the wake of the Suez crisis of 1956 when Israel openly joined with the Anglo-French imperialists to attack Egypt. Had Israel at least tried to be neutral during 1956, the history of Arab-Israeli conflict would have been somewhat different.

The following ten years (1957-1966) were a period of an intra-Arab cold war and superpower rivalry. This made it easier for Israel to establish diplomatic relations with many newly independent countries of Africa. Israel displayed a special interest in establishing military ties and building up her influence in the armed forces of African states. All this was done at the behest of the neo-colonialists, who used Israel, through its trade and military aid, to penetrate Africa. The Israeli-West German rapprochement




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# REVIEW OF MANAGEMENT

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# Business and Politics

WHEN the bill removing the ban on donations by companies to political parties is passed by parliament and the Act goes up to the President for his formal assent, the irony of the situation is unlikely to be lost on Fakhruddin Ali Ahmed, for it was he, as the then minister for industrial development and company affairs, who had in 1969 piloted the bill banning donations for political purposes by companies. He had then defended the measure with fervour not only against opposition spokesmen but also critics in his own party, of whom there were quite a few.

The statement of objectives of the bill introduced in parliament this week states that "experience has shown" that the ban on political donations by parties "has not produced the desired result". The general objective of the ban imposed in 1969 was to reduce the influence of money power on the working of the political system. It is, of course, true, as the latest bill admits, that this objective has not been achieved. The legal ban on donations by companies did not materially affect the flow of funds from business and industry. The under-the-counter flow continued through the medium of intermediaries like selling agents. The market premiums commanded by goods once in short supply, such as cement and paper, came in handy. Nor have companies had much difficulty in circumventing the legal ban on donations and making available funds to political parties openly. There was nothing to stop them from making donations to institutions set up as front organisations by politicians and political parties for precisely this purpose. They were also free to advertise in journals and souvenirs brought out by political parties.

Having said all this, the question remains: how will the removal of the ban on political donations by companies help to reduce the influence of money power in politics which, it is to be presumed, remains the government's objective? Especially how does it help to actually raise the limit on such donations to Rs 50,000 (in place of Rs 25,000) or 5 per cent of net profits, whichever is greater? Once the bill is passed, every company, whatever its size and irrespective of whether or not it makes a profit, can donate Rs 50,000 annually for political purposes. And donations by some of the largest companies, it has been estimated, can run to as much as Rs 20-25 lakhs each every year.

The then minister for industrial development and company affairs, Fakhruddin Ali Ahmed, made a statement in parliament on November 17, 1969 giving details of donations to political parties by commercial and industrial firms belonging to six big business houses — Birla, Tata, Singhanian, Kirloskar, Goenka and Sahu Jain — between 1962-63 and 1967-68. The disclosed donations to political parties by these six business houses during this period amounted to Rs 36,38,408, of which the Congress party got Rs 29,67,500, the Swatantra party Rs 6,35,000, the Jan Sangh Rs 32,552 and all the other parties together Rs 3,356. On an earlier occasion, in reply to a question in the Lok Sabha on March 11, 1969, it has been disclosed that donations to political parties by all companies in the year 1967-68 amounted to over Rs 1.30 crores. Of this, the Congress party received Rs 1,06,47,856 or 81.9 per cent, while the Swatantra party got Rs 21,09,173 or 16.2 per cent and the Jan Sangh got Rs 2,09,681 or 1.6 per cent.

It will be recalled that the Representation of the People Act was amended in December 1974 to exclude expenses incurred by a political party, an association or an individual other than the candidate or his election agent from the election expenses of the candidate for the purpose of determining whether such expenditure was within the ceiling on election expenditure. The amendment has in effect made it even easier than earlier for candidates to evade the statutory ceiling on election expenses by showing the expenditure to have been incurred by persons other than himself and his election agent.

The entirely laudable objective of reducing the influence of money power over the political system thus appears to be receding farther away. This should be cause for some concern at a time when among the many far-reaching changes which are proposed to be made in the Constitution is an amendment of the preamble to describe India as a "socialist" state.



# Technology and Change in Underdeveloped Societies

Vinod Vyasulu

*Modern technology reinforces dependence and perpetuates underdevelopment. An escape from underdevelopment requires, among other things, an alternative technology.*

*Alternative technology must concern itself not only with the technical aspects of the problem but also with the socio-economic and political ones. As a problem of the scientists, alternative technology becomes indistinguishable from the broader questions of social upheaval and social betterment for the majority.*

## INTRODUCTION

THE last few years have witnessed a mushrooming interest in questions of science and technology. The last two or three years have seen the publication of the books of Schumacher (1973), Dickson (1974), Sen (1975), and Harry Johnson (1975). The reports of international institutions study 'appropriate technology', and UNCTAD—IV is considering an international code of behaviour for the 'transfer' of technology. This is in striking contrast to the views of scholars and policy-makers a decade ago. As late as 1970, the former executive secretary of UNCTAD and ECLA, Raul Prebisch (1970, pp 5-6; 184-188; 192-196), expressed what today would be considered very naive ideas. The current interest in science and technology is topical and worldwide; certainly so in India, which saw the birth in 1972, of the National Committee on Science and Technology.

The theme of the Indian Science Congress, early in 1976, was "Science for Integrated Rural Development". Indira Gandhi called upon scientists to develop technologies suitable for Indian village conditions. The scholars gathered at the Congress discussed bio-gas plants and bullock carts. This is a welcome change in India, which has as much invested in bullock carts as in railways.

At a time when so much interest centres on technology, it is essential to discuss the impact of technology on modern society. Such issues have, of course, been discussed by many — such as Lynn White (1962). The generally prevailing view would seem to suggest that advanced technology, i.e., mechanisation, would lead to economic development. But if that were so, why are hard-headed international institutions like the World Bank interested in bullock carts and the like today? The importance of this question to the underdeveloped countries of the world is undeniable. It is a question that needs to be discussed in a historical context.

## TECHNOLOGY AND MODERN ECONOMIC GROWTH

The most important historical fact of the last few hundred years is that some countries have experienced a *substantial* and sustained increase in per capita income that has been accompanied by increases in population and by sweeping structural changes. The structural changes pertain mainly to such processes as urbanisation and industrialisation, necessitated by the modern factory. The economist refers to this historical fact as 'modern economic growth'. North America and Western Europe are the best examples of such modern economic growth.

It is now realised, in the light of historical experience, that the major impetus to modern economic growth lay in the application of principles of science to problems of production. One example of such application is the steam engine which made possible the growth of the railways. Such an improvement of transportation gave a major fillip to industry by widening markets. The momentum from such application has grown, and society has not looked back since.

But such progress has not been an unmixed blessing. Many scholars have expressed concern at the *social* consequences of indiscriminate scientific and technological growth. Juenger (1949, p 23) pessimistically discusses the dangers that might result with the *perfection* of mechanisation. "Underlying strict rationality of technical working methods, we find a way of thinking which cares nothing for the preservation and saving of the substance ... What is euphemistically called production is really consumption.... The radical consumption of oil, coal and ore cannot be called economy, however rational the methods of drilling and mining."

From the point of view of welfare, Mishan prefers to speak of *the costs of economic growth*. Extending current trends by using sophisticated computer simulation techniques, the elite Club

of Rome has, in "The Limits to Growth", predicted that Doomsday is perhaps a hundred years or less away in the future.

It was technology, then, that gave an impetus for modern economic growth. In a detailed study of the fantastic increases in output that characterise modern economic growth, Nobel Laureate Simon Kuznets writes (1966, p 11, emphasis added):

"The application of science meant a proper climate of human opinion in which both the pursuit and use of science could be fostered; and thus, when we say that the modern epoch is distinguished by application of science to problems of economic production and human welfare, we imply that it is distinguished by a climate of human opinion, *by some dominant views on the relation of man to the universe*, that foster science and its application. In this connection it is *particularly important to stress the interrelations of technological, social and spiritual change*. Application of science via technology would not have taken place without changes in social institutions. New attitudes were needed to accommodate and foster adjustment of social institutions and practices to the exploitation of the potential by science-based technology".

Kuznets's use of the word technology is consistent with Johnson's (1975, p 11) definition. Technology

"means the use of techniques involving the use of new developments in 'pure' science; that is, scientific knowledge of the human environment, and its properties, *requiring the investment of large amounts of capital ...* Along with the development of manufacturing technologies of urban city as contrasted with rural village living, new technologies for the distribution of goods on a mass market scale and, also, new technologies for organising and managing large enterprises involving hierarchies of people of differing skills and intelligence.... (emphasis added).

Technology is a social activity, and it requires heavy investments. The social and technological innovations that Kuznets refers to are many and varied; but we can single out for example, money and the banking sys-



tem, the factory, and related modern management techniques which took advantage of economies of scale in modern capital-intensive production processes; the discovery of oil and its uses; and last but not least, the opportunity of the imperial countries to exploit the colonies. All these, and many other factors, led to new attitudes, new institutions, and the Industrial Revolution in England and other countries.

In studying the Industrial Revolution, it is important to note that it was improvements in techniques that led science on. The steam engine, for example, owed very little to the science of heat which existed then. As Harry Braverman (1974, p 157) writes,

"In contrast with modern practice, science did not systematically lead the way for industry, but often lagged behind and grew out of the industrial arts. Instead of formulating significantly fresh insights into natural conditions in a way that makes possible new techniques, science in its beginnings under capitalism more often formulated its generalisations side by side with, or as a result of technological development. To contrast this with the manner in which science has been employed as the cutting edge of industrial change, during the past three quarters of a century, is to contrast science in two very different modes of existence".

Harry Johnson (*ibid*) who is diametrically opposed to Braverman's ideology and analysis, also writes in similar vein.

The "development of the production and use of steel before the rise of the modern steel industry, in the nineteenth century, was one of affecting and passing on minor improvements introduced by unschooled but presumably inquisitive minds... one should recall that the historically important technological developments of the eighteenth and most part of the nineteenth centuries, the so-called period of Industrial Revolution were effected by practical men, very few of whom indeed had been to university".

It seems, then, that both science and industry benefited greatly from the spontaneous and unplanned technical progress in the eighteenth and nineteenth centuries. However, as David Landes (1969, p 237) points out, the end of the last century saw "the exhaustion of the technological possibilities of the Industrial Revolution", and this led to some major changes in the role of science in capitalist society. Science was converted into a commercial commodity. It was, to use Kuznets phrase, *via technology*, made an integral part of the capitalist system. As Braverman (1974, p 166 ff) writes,

"Science is the last ... social property to be turned into an adjunct of capital ... The new scientific technical revolution which replenished the stock of technological possibilities had a conscious and purposive character largely absent from the old. In place of spontaneous innovation indirectly evoked by the social processes of production came the planned progress of technology and product design... Like all commodities, its supply is called forth by demand, with the result that the development of materials, power sources and processes has become less fortuitous and more responsive to the immediate needs of capital. The scientific technical revolution, for this reason, can only be understood in its totality as a mode of production into which science and exhaustive engineering innovations have been integrated as part of ordinary functioning. The key innovation is ... to be found ... in the transformation of science itself into capital".

In an independent, historical study, Marglin (1974) comes to similar conclusions. Marglin studies the division of labour and the question of specialisation from the early days of capitalist growth. He argues that factory technology was evolved because of the needs of capital to concentrate production in one place and thus control workers. This is what bosses do. Thus, since the Industrial Revolution, it is the need of this class that has been shaping technology. Thus was modern technology evolved. This had important consequences, the most important being underdevelopment.

#### TECHNOLOGY AND MODERN UNDERDEVELOPMENT

Recent researchers on the totality of the mode of production of capitalism have demonstrated that those forces which led to modern economic growth in some countries also led, at the same time, to *underdevelopment* in others. We may refer, out of a long list, to P A Baran (1957); A G Frank (1967); W Rodney (1971), and Samir Amin (1974). In fact, such a conclusion is supported by Kuznets's own data but it does not come to light because he does not look for such a link. It is up to those who live in the underdeveloped countries to ask this question. In reviewing Kuznets's work, Amiya Bagchi (1972, p 1566) does so, and finds that

"changes in economic structure cannot thus be recognised as entirely indigenous processes. The very processes that led to industrialisation in these advanced countries and their overseas offshoots led to the stagnation, or worse, of the underdeveloped countries. Apart from the initial social revolutions which produced

capitalism in Europe, this parasitic mode of growth in the nineteenth century makes capitalist growth non-replicable in underdeveloped countries of today".

Two inter-related points are involved here. One is that the underdevelopment of some countries today is linked to the modern economic growth of others. Since modern economic growth is intimately related to science and modern technology, this latter — modern technology — is also intimately related in some way, with the process of underdevelopment. The two are different sides of the same coin — viz, the capitalist mode of production. The second point is that this type of growth — the process of modern economic growth — is 'non-replicable' in the historical sense. The underdeveloped countries of today will, therefore, have to modernise and develop in an altogether different way. The experiences of Cuba and China lend support to this conclusion.

The point under discussion is that the ruling class of the countries that experienced modern economic growth (the advanced countries) have dominated some others, e g, their colonies, through such mechanisms as colonialism, in such a way that they *became* underdeveloped as the capitalist system flourished and prospered. This concept of dependence originated in Latin America (Vyasulu 1974). At first the mechanism was outright plunder; later it was through the mechanisms of colonialism and neo-colonialism. As the Industrial Revolution progressed, and banking grew, the domination became financial. Now, however, the dependence of the underdeveloped countries is changing in form once again. As a result of the successful assimilation of science and technology into the capitalist system, the dependence of the underdeveloped countries is becoming more and more a *technological* dependence. The main instrument of this dependence is the large multinational corporation (MNC) which controls modern technology and directs modern research and development.

There are non-technical aspects of such technological dependence that generate cultural and other forces that reinforce such dependence and perpetuate underdevelopment. These have been studied by Celso Furtado (1973) in the context of Brazil, a show-case example of successful growth in an underdeveloped country. The growth of Brazil has led to certain increases in output and productivity. Here, writes, Furtado,

"increased economic productivity, resulting from increased exports of



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raw materials, caused an increase in and diversification of consumption of the well-off minority, which was geared to the cultural values of the central ('developed') countries. In a more advanced stage, when exports of raw material and import substitution no longer played the role of a transforming factor, growth occurred only when the market created by the modernised minority was compatible with the techniques required to locally produce the diversified basket of consumer goods ... growth in the underdeveloped countries has depended upon the ability of such countries to concentrate income in the hands of the modernised minority".

The culture of this modernised minority is directly related, among other things, to modern and 'transferred' or imported technology. Goonetilleke (1976) discussed this culture in detail: it is a colonial, dependent, culture. This relationship has clear economic repercussions. As Clive Thomas (1974, p 58) points out, the

"productive forces of these countries were torn loose from their root in the domestic market. Thereafter, production became increasingly divergent from, and irresponsible to, the needs of the local people". [This happened because] "European directed relations of production took over. Naturally these were designed to bring the domestic productive forces into the service of the industrial bourgeoisie of Europe."

Furtado goes on to argue that, "Once the dependence has been created, the doors are open to the introduction of all the forms of economic exploitation which typify the relationship between underdeveloped and developed countries. To isolate such forms of exploitation from the framework of cultural domination is to miss the essentials of the problem ... The ability of certain countries to control technical progress and to improve consumption patterns became the decisive factor in the structuring of the productive apparatus of other countries, which in consequence became 'dependent'..." (*loc cit*).

The structure of such dependence has been studied by Theotonio dos Santos (1970), who concludes that, finally,

"industrial development is strongly influenced by the technological monopoly exercised by imperialist centres. We have seen that the underdeveloped countries depend on the importation of machinery and raw materials for the development of their industries. However, these goods are not freely available on the international market; they are patented and usually belong to the big companies. The big companies do not sell machinery and processed raw materials as simple merchandise; they demand either the payment of royalties, etc, for their utilisation, or, in most cases, they convert goods into capital and introduce them in the form of their own investments. This is how machinery which is re-

placed in the hegemonic centres by more advanced technology is sent to dependent countries as capital for the utilisation of affiliates".

Today, most of the former colonies are politically free. But they are largely at the mercy of private foreign investment and technical knowhow — factors that the MNCs control. Emerging trends seem to suggest that ownership is no longer essential to guarantee control. Venezuela, in the last year, nationalised the oil industry that was, till then, largely foreign owned. The MNCs do not seem to be concerned. They have the technology, and, for a 'management fee', they can run the industry in a way that is profitable for themselves.

This last point is emphasised by Clive Thomas (1974, 0,62):

"The first of the features of the international economy relates to the development of technology .... Recent developments indicate that the dynamic processes of technological dependence are leading to newer patterns in the global distribution of capitalist technology. Of most immediate and striking importance is the fact that the resources devoted to technology by governments, the military, and private firms are increasing at a very rapid rate. Inevitably, this has meant that the gap in technology between the capitalist States and the periphery — where resources invested in technology are not increasing at the same rate and with the same success — is widening at a faster rate than even the much heralded gap in average incomes and levels of living".

The point of this is that, when the underdeveloped countries import technology, what they get is the technology of yesterday which the advanced countries are willing to relinquish — and that too, for a price. Vaitos (1973) has shown that the purchase of technology takes place in a bargaining framework in which the dice are loaded against the underdeveloped countries. This high price is paid, not for technology that will lead to growth and progress — as Vaitos shows, the contracts of foreign collaboration in the Andean countries effectively guard against such possibility — but for a technology that the advanced countries continue to control. Subramaniam (1972) makes the same point for India. It is also a technology which, from the priorities of the future of both underdeveloped and developed countries, is already obsolete.

There is some evidence to suggest that the reliance on technological superiority is part of a deliberate strategy on the part of the ruling class of the advanced countries to foster their own ends. This is a matter that needs to be looked into. And, this

strategy is inextricably linked with the continued underdevelopment of the poor countries. The following words of Hubert Humphrey (then US Senator) show how the US government consciously followed policies that would enable it to dominate over other countries:

"I have heard ... that people may become dependent on us for food. I know that was not supposed to be good news. To me that was good news, because before people can do anything they have got to eat. And if you are looking for a way to get people to lean on you and to be dependent on you, in terms of their co-operation with you, it seems to me that food dependence would be terrific ..." (Cleaver 1972). And Nobel Laureate Paul Samuelson advocates that the United States live off the royalties it receives for its technological and managerial knowhow.

In a speech before the Chamber of Commerce in New York, Samuelson (1972) said:

"Under modern trends of comparative advantage, American Management knowhow (and, for that matter, management knowhow anywhere) and American mobile capital may find that their most efficient use is increasingly to employ foreign labour as a substitute for traditional American activities ... So, under floating exchange rates and relatively free trade equilibrium, the United States might in turn become a headquarters economy. Our emphasis in employment would shift to services and away from manufacturing .... It would become normal for us to enjoy an unfavourable balance of merchandise trade ... this trade deficit would normally be financed by our current invisible items of interest, dividends, expatriated profits and royalties".

Samuelson is fully aware that the United States is increasingly becoming the centre of a worldwide system, where other countries are becoming dependent on its monopoly (mainly through the multinational corporations) of 'knowhow'. He is not concerned with the underdeveloped countries. This tendency has also emerged as an important conclusion of the independent study of current trends in the international division of labour of Frobel, Heinrich and Krege (1976).

It follows that such dependent growth in underdeveloped countries, divorced as it is from the needs of the local people, tends to perpetuate underdevelopment. It cannot lead to the true development and progress of the local people. Modern economic growth is thus 'non-replicable' in the underdeveloped countries of today. Furtado develops this proposition after studying Brazilian experience. K N Raj warns of a similar predicament in India (1976). In fact, he refers to Furtado's analysis of the Brazilian model.



Briefly then, as Habakkuk (1967) has shown, historical conditions, at one time and place, were such that the principles of science were applied to the problems of production in a *certain* way. Scientific principles (like  $E = mc^2$ ) are universal, in the sense that, they operate everywhere — in England as in India. But the use that is made of these principles, their *commercial* application — modern technology — is a *social activity*, and depends upon social conditions. The principle  $E = mc^2$ , and other such principles, can be used, as the American ruling class did in 1945, to drop an atom bomb. The same scientific principles can be used also to design machines which aid agricultural production or to treat disease. Such technologies could have been devised. But they were not, because the corporations that decide technological priorities did not see a profit in them.

Modern technology reflects its social milieu, in the sense that, it is a manifestation of the principles of science applied to the *historically specific problems of production in certain (now developed) countries* — the thesis of Habakkuk (1967). Other people can apply these same basic principles very differently. In this context, the work of Georgescu-Roegen (1971) merits serious study. It has, unfortunately, been by-passed rather than studied, by social scientists (Vyasulu, 1974b).

The point is that the principles of science, as in physics or astronomy, are universal in the sense of being neutral with respect to the time and place of their discovery. They may apply, as the law of entropy does, in Germany or Cuba or India. But there can be many technologies based on these principles.

#### INTERMEDIATE TECHNOLOGY

It was this realisation which led to the concept of 'intermediate technology'. The term was coined by British economist E F Schumacher, on the basis of his work and experience in India. The primary consideration of intermediate technology is to maximise the work opportunities for the unemployed and underemployed, in contrast with modern technology which maximises the output per person employed.

Intermediate technology is also a reaction to the fact that modern technology and rapid industrialisation have led to many problems in the advanced countries. This has been very clearly recognised in the counter-culture of the United States. In fact, the foreword to Schumacher's book is written by Theodore Rozak, an important

spokesman of the counter-culture. These problems, often, have little *direct* link with technology. Yet, they are products of modern economic growth. Socially conscious and philosophically minded scholars have repeatedly made this point in various contexts. We may refer, for example, to C S Lewis, (1947), Josef Piper (1960), Ivan Illich (1974), Paulo Freire, (1970), Tuenger (1949). Many of them refer nostalgically to a less technologically complex age, but have no solution to offer. Freire, perhaps, is an exception.

It has also, in recent years, become evident that modern technology, when 'transferred' to the underdeveloped countries, has had little impact on employment, but has been at the root of much unrest. Examples are the strike of the workers when the Life Insurance Corporation of India decided to go in for a computer; the political costs of the new agricultural technology in Punjab — as analysed by, for example, Francine Frankel (1971); or our experience in importing technology, as studied by Subramaniam (1972), or Chishti (1975).

It was in this context that intermediate technology was conceived. To this group, Small is Beautiful. In India, an intermediate technology group has just been formed in Lucknow. The group views technology as a variable with respect to scale. Intermediate technology then looks to the employment needs of the traditional sectors of the underdeveloped economies. Thus, it attempts to solve or to mitigate the problems created by modern technology.

If, for example, it costs the equivalent of Rs 1,000 to create a job in the traditional sector (e.g. a bullock-cart

driver), and it costs the equivalent of Rs 100,000 to create a job in the modern sector (e.g. an assembly-line worker), intermediate technology aims at creating a job for, say, Rs 10,000 as, say, a bio-gas plant attendant.

Intermediate technology accepts the role that technology has played in the process of modern economic growth. It then assumes that it will play the same, or a similar role, in the development of the underdeveloped countries. And Schumacher's Intermediate Technology Group in London, along with such other groups elsewhere, tries to contribute to the process by collecting labour-intensive, small-scale technologies that exist in various societies; by suitably modifying known modern technology, and sometimes, by recommending technology that may be obsolete in the rich countries, but is suitable for the current needs of the underdeveloped ones.

Last, all this sounds utopian. Consider this Table, which compares large-scale coal-based fertiliser plants with small-scale bio-gas-based fertiliser plants. (Taken from C R Prasad, K Krishna Prasad, and A K N Reddy, 'Bio-gas Plants: Prospects, Problems and Tasks', *Economic and Political Weekly*, Special Number, 1974.) That this is not a single exceptional case can be easily seen by going through the ILO studies (Bhalla 1975). It is, however, a case in which the alternatives stand out distinctly.

For countries like India the advantages of the small-scale bio-gas plants are clear. Their capital cost is lower, they require no foreign exchange, and they result in a tremendous increase in employment — all of which is in the rural areas. In both cases, the same

TABLE: LARGE-SCALE COAL BASED v/s BIO-GAS BASED FERTILISER PLANTS

	Large-Scale Coal Based Fertiliser Plant	Bio-Gas Fertiliser Plant
Annual production/unit	500,000 tonnes urea	690 tonnes compost
Annual Nitrogen production	230,000 tonnes urea	8.8 tonnes compost
Capital cost/unit	Rs 120 crores	Rs 41,000
Foreign exchange component	about Rs 50 crores	Nil
Employment/unit	1,000	5
Sales @ Rs 4,350/tonne N	about Rs 100 crores	Rs 38,280
Capital/turnover ratio	1.20	1.07
To produce		
230,000 tonnes N:	1	26,150
(a) Number of units	Rs 120 crores	Rs 107 crores
(b) Capital cost	about Rs 50 crores	Nil
(c) Foreign exchange	1,000	1,30,750
(d) Employment	about 35 MWH	63,50,000 MWH
(e) Energy	Consumption	Generation

Source: Loc cit.



quantity of nitrogenous fertiliser is produced, but whereas the large-scale plants consume a large amount of energy in the form of electricity, the small-scale plants generate a very large quantity of energy in the form of bio-gas (usually methane). The small-scale plants, furthermore, can be scattered over the countryside, thus helping regional development and saving money from programmes of rural electrification, as well as reducing the burden on available transportation systems. And, because they are not concentrated in one place, the evils of urbanisation — crowding, crime, pollution and the like — do not arise at all. Upon this, intermediate technology rests its case. It is a subset of the general category of 'appropriate technology', in that, it is supposed to be made to order to suit the socio-economic needs of a 'developing' agrarian society.

Intermediate technology can deal with a wide variety of problems — problems that scholars sometimes fail to discuss though they often stare them in the face, such as starvation, sickness, inadequate housing, and the like. Consider the problem of cooking utensils in a village kitchen. The housewife in the village cannot, and perhaps should not, go in for aluminium and teflon. Is it possible to help the potter in the village to make sturdier vessels? Cannot these earthen vessels be used also for storing bio-gas? If so, what kind of changes are needed? What are the tolerances of this material, and what type of safety factors do we need? Consider the house of any villager. In many parts of the country, all he can afford for a roof is thatch. Is it not possible to make that thatch fire-proof? Can we not improve the engineering of mud walls so that they can better resist the onslaught of the monsoon? Can we not design small generators that will operate in every little stream, so that, in the aggregate, we can meet our requirements through a grid of hydel projects? Must we think only in terms of projects that will cost Rs 20,000 crores and link the Ganges and Cauvery? Why do we feel that only projects like Bhakra Nangal will solve our problems? Why cannot the solution lie in bio-gas plants and bullock-carts and windmills — and full employment of our huge labour potential? This viewpoint is now receiving encouragement from the National Committee on Science and Technology (1975).

These are questions that need an answer. The engineering and economic problems of such technology are

challenging, and of the most difficult order. For example, the type of social cost-benefit analysis required, and the type of pricing policy that will be suitable, will tax the skills of the most consummate economist. The challenge is in the intricacy and complexity of the problems involved. The satisfaction is in the fact that the solutions are presumed to help those who most need them; the majority who live in undeserved squalor and poverty.

What intermediate technology does not do is to question the link between existing modern technology (and, by implication, the absence of 'appropriate technology') and the conditions of underdevelopment. It accepts the view that technology is an objective and ethically and politically neutral response to the production needs of any society. It accepts the view that it is mainly through technological innovation that the underdeveloped countries will grow and develop. And it is here that it fails to conform to the findings of recent research, that modern technology is inextricably linked to modern underdevelopment (Dickson, 1974). This is the view we stated above, in quoting Bagchi's review of the findings of Kuznets. This is illustrated in the specific case of civil construction technology by Croner (1975, p 1771), who critiques a major World Bank study which uses non-classical methodology. The starting point of the World Bank study is the concern that the "unemployed... may become dissatisfied with the prevailing political, economic and social structures of their countries". The rest follows.

The social milieu of underdevelopment is now linked with modern technology. It is, in the same way, linked with intermediate technology, which is a flexible form of modern technology. What a policy designed to cure a society of its underdevelopment needs, then, is not modern or intermediate technology, but an *alternative* technology. But an alternative technology, by itself, will not solve the problems of underdevelopment of any society. Alternative technology will be a *necessary*, but not a *sufficient* condition for that.

*This must not be taken to mean a total rejection of modern, large-scale technology.* In some sectors, like steel, heavy machinery, and machine tools, to name a few, modern technology may well be the only possible solution. Makhijani (1975, p 12) makes the point very clearly.

"Large-scale industrialisation ap-

propriate to larger towns and cities is necessary to support the development of agriculture. This is true in spite of the fact that an emphasis on labour-intensive technologies and an emphasis on local resources tends to make production of many goods economical at the scale of a village or market town plant. The failure of China's great Leap Forward is a reminder that many industrial activities — such as steel production — are too expensive on a decentralised basis. Pumps, electric motors, and similar goods, must be manufactured on a large scale or they will cost much more than imported equipment. Roads and railways must be built; ports must be developed; large-scale power plants must be built to serve industry. But the main aim of an industrialisation programme at all levels (village, market town, and city) must be the support of a dynamic agricultural economy — one that transforms today's halting progress, punctuated with famine, into genuine economic progress for the Third World."

The point is that modern, large-scale technology is not the only solution for all the areas of activity. It has to co-exist, at least in the Indian economy, with alternative technology. Underdeveloped countries need the products of modern industry. But these societies cannot look to modern industry for a solution to the social problems of unemployment, urbanisation, or pollution. That solution lies elsewhere. What is needed is a proper balance of modern and alternative technology.

Technology is part and parcel of the social milieu, because it is the institutionalised or commercialised form of scientific knowledge. In commercialising scientific knowledge, — e.g., in producing steel for the market rather than in a laboratory, or in growing wheat for sale rather than for self-consumption — the relevant consideration is the reduction of cost. Cost itself is measured by the yardstick of prices. Now, in society, prices are supposed, not only to reflect the relative scarcity of resources, but also to equate the supply and demand for commodities. Prices do *not* reflect the availability of resources or the need for essentials — unless people are willing to pay for them. Demand, in economics, reflects not need for a good, but a desire for it coupled with an ability to pay the price asked. This is the reality of society today and the National Committee on Science and Technology recognises it explicitly.

People may be unemployed and machines may be underutilised. Food may be thrown into the sea while



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people starve. This is because prices reflect monetary demand and the ownership of resources. What market prices (or modified forms of market prices) do is to indicate the most efficient use of resources for those who own them. Others are left out in the cold. Hence the unemployment and starvation side by side with cadillacs and diamond-studded dog chains.

The point is that technology reflects market reality, and is dependent upon the distribution of incomes or, rather, the pattern of ownership of property, in society. And the most recent form of technology reflects the most recent form of the market — monopoly capital and its carrier of technology, the multinational corporation. At this point, let us re-examine the data given above on the costs and benefits of the two types of fertiliser plants.

#### ALTERNATIVE TECHNOLOGY

The initial outlay on even the smallest bio-gas plants is beyond the reach of all but the most affluent farmers — as the authors point out. What happens, for example, to villagers who do not own cattle? Whether the bio-gas is provided by the farmer or by a firm, how are the energy needs of the village poor to be met? As the authors point out, if the

“burning of dung and firewood is banned as a wasteful practice, and the villagers are in no position to buy bio-gas, they will end up with no fuel at all — in other words, their position will be worsened by the introduction of bio-gas plants”.

And Prasad, Prasad and Reddy raise this question because they are concerned, not with intermediate technology, but with *alternative* technology, not simply with scale and factor proportions, but with social change. In the same way, putting pneumatic rubber tyres on bullock carts, helps the manufacture of tyres. It also, at current prices, puts the bullock cart way beyond the poor peasant who now uses it. He is ‘worse off’ if bullock carts are modernised! If the peasant is to improve his situation, the menu has to change to suit the diet. Alternative technology tries to suit the diet, rather than modify the scale of production in one way or another.

With modern technology, he is unemployed and poor because he does not have the Rs 100,000 of capital needed. With intermediate technology, he is ‘better off’, in the sense that, he is unemployed because he does not have the Rs 10,000 of capital that is needed. In one case he is an un-

employed bus driver. In the other, an unemployed bullock-cart-wheel maker. In both cases, he is *unemployed*. It is this unemployment that alternative technology has to face. The question is not one of how much it costs to create a job; because in both cases he cannot afford it. This is the basic problem with projects like India’s Crash Scheme for Rural Employment, (discussed by A K Sen, *op cit*). And this unemployment can only be tackled if the emphasis is shifted away from finance where the dice are loaded against the poor, and *towards* an institutional set-up in which the poor person has an *intrinsic motivation* to work. He can contribute, paradoxically, his ability to work, but he cannot finance such a project.

Alternative technology not only includes within itself the technical concerns of intermediate technology, it is also concerned with the question of who pays the costs and who reaps the benefits. Alternative technology looks to a greater and gradually increasing equality in the distribution of benefits. It must dissociate itself from the trend of ever greater inequality that characterises both modern and intermediate technology. As David Dickson writes,

“an alternative technology must be such that every person is in direct control of his or her own life. It must be such that work becomes reintegrated with all other areas of collective social activity and experience. An alternate technology must contribute to a non-alienating, non-exploitative way of life”.

(It is, of course, not sufficient to do away with such problems). In a distinct, but related, context, Makhijani (1975, p 136) writes that “our discussion here has inevitably departed from strict concern with energy and entered into some wider considerations about development. Energy policy is, of course, just one of the strands in development policy and cannot succeed by itself. Equitable, productive distribution of food is fundamental. Not only is it necessary from a practical and humanitarian point of view; it is also a precondition for convincing poor people that they will share in the fruits of development. Without that conviction, the rural poor are most unwilling and unlikely to make the changes that development may require”. Croner (*op cit*) also makes this point. It is here that the political nature of technology stands clearly revealed. Alternative technology is the technology of the oppressed class, as the discussion by Griffiths (1975) clearly shows.

Technology — alternative technology

— must, therefore, concern itself not only with the technical aspects of the problem, but also with the socio-economic and political ones. Thus, in the case of bio-gas plants, the authors’ recommend that, tentatively,

“it appears as if the best approach is for the panchayat (village council) to deem it a prime responsibility to supply energy for cooking and lighting to all the houses. As a sort of ‘development rebate’, this gas can be supplied free for a couple of years until purchasing power picks up. The point is that there is a need to evolve a pricing policy for bio-gas energy and fertiliser, keeping in mind social costs and benefits”.

This might be naive in its assumptions about the panchayat, but that is only an argument to probe deeper into these issues. Co-operative and collective solutions, like, say, communal kitchens, must be tried out. This is a far cry from the objective character of modern intermediate technology. If anything, alternative technology has to become more specific and sophisticated in its consideration of political and cultural factors. It must recognise its class character.

In sum, then, it may be said that modern technology reinforces dependence and perpetuates underdevelopment. An escape from underdevelopment requires, among other things, an alternative technology. And alternative technology, as a problem of the scientists, becomes indistinguishable from the broader questions of social upheaval and social betterment for the majority.

[In working on this paper I have incurred a number of intellectual debts to friends and colleagues in Bangalore; it is not possible to single them all out. An earlier draft has benefited from the criticism of Harry Magdoff. For the opportunity to study the concept of dependence, I am grateful to ICSSR for its encouragement and sponsorship. However, opinions expressed here are not those of anyone but myself.]

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# Management Development

## A Diagnostic Study

S K Chakraborty

*The success of Management-by-Objectives as a change approach depends very much on the psycho-social variables in an organisation. A knowledge of some of these is, therefore, essential before launching an MBO programme in an organisation, especially when management development and managerial effectiveness are its focus.*

*This paper deals with some of the important variables of organisational reality. Section II deals with 'power and influence', Section III with 'authority', Section IV with 'performance appraisal' and Section V with 'objectives'.*

*These variables have been discussed separately because of their operational significance and the particularly crucial role they play in MBO.*

*In Section VI an attempt has been made to relate these variables to a common end-result variable: 'managerial effectiveness'.*

### I

THE emphasis on a clear definition of organisational goals is the first prerequisite of Management-by-Objectives and similar other approaches. But MBO also recognises that organisations are made of people and the success of MBO as a change approach would very much depend on the psycho-social variables in an organisation. The process and content of goal formation will be influenced by these background factors. A knowledge of some of these is, therefore, essential before launching an MBO programme in an organisation — especially when management development and managerial effectiveness are its focus.

Thus, MBO-based change-programmes, as conceived by us, are usually preceded by an attitude and/or opinion survey which is typically based on a questionnaire circulated to the managerial personnel. In 1974, we conducted such a questionnaire survey in a public-sector organisation belonging to the mining group of industries. This was done after all the managers had participated in a three-day MBO seminar in two groups.

The questionnaire has two parts. (The questions of both the parts are shown in the Appendix.) Part A consists of eleven questions, the response to each being sought on a 5-point scale. The five points on the scale are: (i) strongly agree (ii) agree (iii) undecided (iv) disagree and (v) strongly disagree; the numerical values being 1, 2, 3, 4 and 5, respectively, for each label. The questions in Part A are designed to uncover the perception of interviewees about certain important organisational variables, such as managerial effectiveness, the use and base

of authority, the role and composition of such authority, the introduction of MBO, etc. We shall examine the responses to some of these questions in later sections.

Part B consists of 16 questions, each question having 3 parts, (a), (b) and (c).<sup>1</sup> The response to each part of a question covers a 7-point scale numbered 1 through 7. The respondent is required to put a check mark (✓) on any of the 7 numbers. The three parts of each question are intended to give a measure of three very important psychological variables, viz, need-fulfilment now, need-fulfilment desired, and the importance of a need. The 16 questions of Part B are designed specifically with an MBO orientation, and thus they try to highlight the 'needs' for clear objectives, group participation, communication, self-development, etc. It will be beyond the scope of this paper to discuss the responses to all the 16 questions, but all the major ones will be discussed in subsequent sections.

The total number of responses is 48 out of 52 managerial personnel. To facilitate further analysis, the responses have been tabulated — first according to salary-groupings and then according to the grouping by the number of years spent in the organisation.

The 'salary' sub-groups are:

- (i) Rs 400 to Rs 950 and Rs 700 to Rs 1100
- (ii) Rs 1100 to Rs 1600
- (iii) Rs 1300 to Rs 1800
- (iv) Rs 1500 to Rs 2000 and above.

The 'Tenure'

- (i) Between 0 and 5 years
- (ii) " 5 + and 10 years
- (iii) " 10 + and 15 years
- (iv) " 15 + and above

The rationale for selecting these two parameters is that, in the absence of other information, 'salary' is the best indication of organisational hierarchy. The second parameter, i.e., tenure in an organisation should also give an idea about 'position' in the organisation, but it is more relevant in testing whether 'tenure in organisation' has any significant effect on a manager's opinions and perceptions.

The following portion of the paper has been divided into several sections dealing with some of the important variables of organisational reality. Section (II) is on 'power and influence', section (III) is on 'authority', section (IV) is on 'performance-appraisal', and section (V) is on 'objectives'. These variables have each been discussed in separate sections because of the significance in the operational context, and due to the particularly crucial role they play in MBO. We have finally tried to relate in section (VI) the above intervening variables to a common end-result-variable — viz, 'managerial effectiveness'.

### II

#### Power and Influence

It is not without reasons that no less than 6 questions in Part A are in some way or the other connected with the concept of authority. Central to the 'psychological contract' entered into by both the individual and the organisation is the concept of a 'system of authority'. Robert Presthus has shown how authority is intimately related to hierarchy in a big organisation.<sup>2</sup> Etzioni has drawn attention to the possible correlation between the nature of individual commitment and the type of authority that



TABLE 1 : RESPONSE TO QUESTION 5 OF PART B — DEGREE OF INFLUENCE IN SETTING SUPERIOR'S OBJECTIVES

Item	Salary				Tenure				Total
	(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)	
(a) What is now	3	3.1	2.5	2	3.3	2.5	2.1	1.8	3
(b) What ought to be	4.9	4	4.5	4.8	4.5	4.3	4.5	4.4	4.4
(c) How important	5.3	4.4	5.75	5.5	5.1	4.5	5.1	5.6	5
(d) (b) — (a)	1.9	0.9	2.0	2.8	1.2	1.8	2.1	2.6	1.4

TABLE 2: RESPONSE TO QUESTION 15 OF PART B — SUBORDINATE'S INFLUENCE IN SETTING MY OBJECTIVES

Item	Salary				Tenure				Total
	(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)	
(a) What is	3	2.9	4.5	3.66	3.1	3.4	3.5	1	3.2
(b) What ought to be	4.4	4	4.75	5.3	4.3	4	5	4.4	4.4
(c) How important	5.5	5	6.25	5.7	5.5	5	5.1	5	5.3
(d) (b) — (a)	1.4	1.1	0.25	1.6	1.2	1.6	1.5	3.4	1.2

TABLE 3: RESPONSE TO QUESTION 8 OF PART B — SUPERIOR'S CONCERN FOR MY CAREER

Item	Salary				Tenure				Total
	(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)	
(a) What is	2.7	2.6	2.5	3.8	3	3	1.8	2.2	2.76
(b) What should be	5.2	5.5	6.0	5.8	5.2	5.8	5.5	5.6	5.5
(c) How important	6	6.1	7	6.8	6.1	6.4	6	6.8	6.24
(d) (b) — (Q), Relative deprivation	2.5	2.9	3.5	2.0	2.2	2.8	3.7	3.4	2.74
(d)									
— × 100 =	92.6	111.6	140	52.6	73.5	93.3	206	155	100
(a)									

is in force.<sup>3</sup> More relevant is the fact that, in the evolution of management philosophy, the basis for legitimisation of organisational authority has changed along with changes in the assumptions regarding man and his role in an organisation. Any study of an organisation, specifically in the context of MBO, would remain incomplete without an examination of the patterns of authority relationships.

One should possibly pause here for a while and examine two other related terms — i.e., 'power' and 'influence'. In practice, these three terms may be used interchangeably, even by a behavioural — scientist. It is interesting to find E H Schein making the statement that: "The area of leadership and authority serves as a kind of bridge between group processes and inter-group or organisational processes. Managers have the power... to influence what goes on in their immediate inter-personal surroundings, ..." ("Process Consultation", A W, 1969).

'Power' is the ability to affect the behaviour of other members' perform-

ance; it is a behavioural relationship between members. The power relationship typically starts from the boss. Where the situation is reversed and the subordinate affects his superior's behaviour, we shall call it 'influence'. When some people say that authority is accepted from below, they are possibly confusing 'authority' with 'influence'. Authority is a structural concept (unlike power which is behavioural) and "refers to the locus and degree of dispersion of decision-making within the organisation".<sup>4</sup> Generally speaking, a hierarchical authority structure is to be favoured when "environments are relatively stable, problems can be effectively programmed, and skills for such programming are centrally and authoritatively located in the organisation."<sup>5</sup>

In our terminology then, authority and influence are two variants of power with opposite flow directions. This has been tried to be brought out by item 7 of Part A of the questionnaires. We find that the aggregate score is 3.16 which signifies a mild disagreement with the statement that "in the work situation, if my subordinates cannot influence me

then I lose some influence on them". It would thus seem that, in the opinion of the respondents, the superior's exercise of power on his subordinates is not impaired by the latter's loss of influence on the former. Thus authority and influence, although mutually inverse in character, seem to be independent of each other. The aggregate opinion, however, does not disclose the fact that the disagreement becomes progressively stronger from an almost non-committal score of 3.05 for salary slab (i) to a somewhat definitive 3.5 for salary slab (iv). Thus, the higher the level of the manager, the less concerned he seems to be about the usefulness of subordinate influence on him. This could be an important change-target for the MBO approach to management development: the arousal of more widespread recognition of the need to be influenced constructively by subordinates in the work situation. The picture is less clear if one examines the tabulation of responses against the parameter of tenure, where agreement with the statement is shown by group (iii) and group (i) with scores of 2.5 and 2.94, respectively.



TABLE 4 : RESPONSE TO QUESTION 13 OF PART B— REFLECTION OF MY PERFORMANCE IN REWARDS AND PUNISHMENTS

Item	Salary				Tenure				Total
	(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)	
(a) What is	2.44	2.3	2.5	3.67	2.56	3.2	2.33	1.8	2.7
(b) What should be	5.88	5.83	5.5	6.17	5.5	6.3	5.8	5.4	5.86
(c) How important	6.2	6	6.25	6.5	6	6.5	6	5.6	6.2
(d) (b)—(a), Relative deprivation	3.44	3.53	3.9	2.5	2.94	3.1	3.47	3.6	3.16

TABLE 5 : SUMMARY OF RESPONSE REGARDING SUPERIOR'S COMMUNICATION TO SUBORDINATE ABOUT PAST YEAR'S PERFORMANCE

Item	Salary				Tenure				Total
	(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)	
(a) What is	2.3	2.2	1.5	2.7	2.3	2.6	2	1	2.3
(b) What should be	6	6.3	5.75	6.7	5.7	6.3	6.5	6.8	6.2
(c) How important	6.5	6.6	6.75	6.8	6.3	6.7	6.5	7	6.6
(d) (b)—(a)	3.7	4.1	4.25	4.0	3.4	3.7	4.5	5.8	3.9

Item 7 of Part A is also related to the concept of participative decision-making. Those respondents who disagree with the statement in item 7 possibly unwillingly disclose their latent fear about participative decision-making. Such fears may not be totally unrealistic because some subordinates may interpret their superior's participative leadership style as a sign of weakness. The aggregate weighted average score against item 3 of Part A is 2.37. This indicates some degree of agreement — that managing in the organisation was more directing than convincing. Now, convincing would operationally imply a more open and participative style. And this is not in evidence in the replies to item 3. Thus, the response patterns to items 7 and 3 of Part A are complementary.

The word 'influence' is again to be found in items 3, 4, 5 and 16 of Part B of the questionnaire. However, the meaning of the word changes with a change of context. Thus, in items 3 and 4 of Part B, 'influence' does not have the same meaning as imputed to it so far. We would accordingly postpone discussion of the response to these items till some time later. But we should examine the responses to items 5 and 16 of Part B in the context of our present interpretation of 'influence' as a process used by subordinates to affect the behaviour of their superiors. Specifically, in keeping with the MBO slant of the survey, the behaviour that is highlighted is that of 'setting objectives'.

Table 1 summarises the responses to 5 (a), (b) and (c), of Part B.

This question specifically deals with the degree of influence a subordinate has in setting his superior's objectives. The aggregate weighted average scores are 3 in (a), 4.4 in (b), and 5 in (c). The difference, (b) — (a), signifies the extent of a need not being fulfilled. In this particular case, the lack of need-fulfilment at the aggregate as well as individual subset level can be seen in Table 1.

It is somewhat interesting that the hiatus between 'what is' and 'what ought to be' is at a substantially high level of 2.8 for those who are in the highest salary brackets, and at an equally high level of 2.6 for those who have spent the longest years in the organisation. In addition, Table 1 also reveals that relative dissatisfaction, as signified by (b) — (a), gradually increases with the number of years spent in the organisation, as can be seen from the scores of 1.2, 1.8, 2.1 and 2.6. One may also observe from tenure-subgroups that the scores against (b) have remained more or less constant at 4.5, 4.3, 4.5 and 4.4, but the scores against (a) have shown a steady decline from 3.3 to 1.8. The salary subsets also reveal a somewhat declining trend in scores against (a).

We are thus faced here with a situation where an organisational member sees himself as exerting less and less influence on his superior's objectives as he spends more and more years in the organisation, or as he rises up the organisational hierarchy. Since we are dealing here with the perceptions of managers, it is possible that such percep-

tions could either be a true reflection of reality, or could be entirely misconstrued. And yet perceptions are important, because an individual's dissatisfaction finally depends on how he views reality. The situation, as revealed here, could be substantially improved after implementation of MBO where participation and communication among superiors and subordinates from the *sine qua non* of objective formulation. (For a detailed description of the MBO process, the reader may see the exposition by Chakraborty.)<sup>6</sup>

Let us now see the other side of the coin by examining the responses to question 15 of Part B, which specifically addresses a superior to the aspect of 'subordinate's influence over setting my objectives'. The aggregate scores are 3.2, 4.4 and 5.3, respectively, against (a), (b) and (c). Table 2 here shows the weighted average scores against each subset.

Although the respondents against Q 15 of Part B are the same individuals who have answered Q 5 of Part B, it is somewhat surprising that the aggregate score is 4.4 against both 5 (b) and 16 (b). Since the role of a respondent to Q 15 is exactly opposite to that of Q 5, there is no reason why the responses to Q 5 and Q 15 should be identical. The score of 4.4 may thus be just a coincidence. But it is a happy coincidence, because the 'superiors' and 'subordinates' do not seem to be having any disagreement regarding 'what ought to be' the degree of subordinates' influence over the superior's objectives.



Relative dissatisfaction at the aggregate level is 1.2, as revealed by (b) — (a). The corresponding figure in Table 1 was 1.4. Thus, the superiors seem to be almost as dissatisfied as the subordinates regarding the present degree of subordinate influence over the superior's objective. If these two involved groups are equally alive to a problem then it may be assumed that they would welcome a structured, participative, problem-solving forum, the kind of which is offered by MBO.

### III

#### Authority

Given that an authority structure is the backbone of any formal organisation, two important questions need to be asked in any specific organisational survey: (a) what are the sanctions behind the existing authority-structure?, and (b) how do managers in positions of significant authority behave?

Authority has been generally described in management literature as legitimised power, and the three bases of legitimacy according to Max Weber are: (i) tradition, (ii) rational-legal organisation, and (iii) charisma. But "Weber did not include in his analysis the purely *rational* basis of authority" relating to someone's expert knowledge

and "regardless of his position, personality, or social origin".<sup>7</sup> Schein then continues to tell us that one of the more difficult organisational dilemmas which frequently arises is when a person in a *position* of authority (based on a rational-legal system) is not perceived as an *expert* in relation to the tasks required of that position. A measure of this perceptual gap could again serve as a sign for appropriate management development efforts.

In our survey, Q 2 of part A addresses itself to the above aspect of authority. The aggregate weighted average score is 2.755, which shows a very mild agreement with the statement that "The superior's authority over subordinates in this organisation is based on the former's competence".

The aggregate figure, however, does not tell us the full story. Out of a total of 8 sub-groups (4 against 'salary' and 4 against tenure), three sub-

groups have shown mild 'disagreement' with the statement. Most convincing 'agreement' has emerged from sub-group number (iii) against salary and sub-group (iii) against tenure with scores of 2 each. In general, the respondents would agree, albeit mildly in the aggregate, that the authority-structure has a rational-legal base. One should not, however, lose sight of the fact that in certain pockets of this organisation [*viz*, subset (i) against 'salary' with a score of 3.2 and subsets (i) and (iv) against 'tenure' with scores of 3.22 and 3.2] something has to be done so that the superior's position of authority is seen as being more positively correlated to his competence. It is quite possible that managers in the lowest salary brackets and with the shortest service-spans, are also the youngest and more professionally qualified recruits. For them, the perception of lack of expertise or competence

TABLE 6 : SUMMARY OF RESPONSES TO 'OPPORTUNITY FOR SELF-DEVELOPMENT'

Item	Salary				Tenure				Total
	(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)	
(a) What is	2.75	3.5	3	4	2.67	3.7	3.8	2.6	3.3
(b) What should be	6.25	6.0	5.75	6.1	5.8	6.4	6.1	5.6	6.1
(c) How important	6.5	6.2	6.75	6.67	6.2	6.7	6.3	6.	6.4
(d) (b) — (a)	3.5	2.5	2.75	2.1	3.13	2.7	2.3	3.0	2.8

TABLE 7 (RESPONSE TO Q 1B)

"Availability of clear and distinct performance objectives"

Item	Salary				Tenure				Total
	(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)	
(a) What is	2.7	3.7	4.75	3.5	2.9	3.3	4.7	2.8	3.22
(b) What should be	5.9	6.3	6.25	5.8	5.8	6.3	6.5	6.6	6.1
(c) How important	6.2	6.35	6.75	6.7	6.2	6.6	6	5	6.37
(d) (b) — (a)	3.2	2.6	1.5	2.3	2.9	3.0	1.8	3.8	2.88

TABLE 8 (RESPONSE TO Q 4A)

"Individual's objectives should always be set in the relevant 'group' settings"

Item	Salary				Tenure				Total
	(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)	
Weighted Av Score	1.75	1.9	1.5	1.85	1.83	1.79	1.8	1.8	1.81

(Scale: Strongly agree — 1, Strongly disagree — 5)

TABLE 9 (RESPONSE TO Q 2B)

"Group-participation preceding the setting of individual objectives"

Item	Salary				Tenure				Total
	(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)	
(a) What is	1.7	2.1	3.5	2.7	1.8	2.3	2.8	2.4	2.16
(b) What should be	5.8	5.5	5.5	6.5	5.4	6.4	5.0	6.2	5.7
(c) How important	5.94	5.6	6.0	6.5	5.67	6.1	5	6	5.8
(d) (b) — (a)	4.1	3.4	2.0	3.8	3.6	4.1	2.2	3.8	3.54



amongst older personnel is likely to be strongest. In order not to demotivate the youngest cadre too soon, appropriate managerial approaches and styles are called for.

While on the subject, one should also examine the responses to Q 8 of Part A. The aggregate weighted-average score of 2.9 is almost on the verge of being 'undecided' regarding the statement: "I respect my superior because of his position of authority". However, in 2 subsets, notably subset (i) against 'salary' and subset (i) against tenure, the scores are 2.56 and 2.32. These comparatively low scores suggest that people who occupy lower echelons of organisational hierarchy or those who have spent comparatively less number of years (less than 5 years), may tend to show outward respect to the superior merely because he is in a seat of authority. Such acceptance of a superior seems more aligned to religious authority, where 'God' is respected partly because of tradition and partly because of fantasy. The answers of those people may also mean that the superior would *not* have been respected if he were not occupying the seat of authority. This sort of response by these subsets is complementary to their response to Q 2A. Authority not being legitimised for them through competence, it is tolerated as a price for holding a junior position in a hierarchical structure. In this regard an opposite answer could be more definitive: e.g., subsets (iii) and (iv) against 'salary', and subset (ii) against tenure have shown disagreement with the statement with their scores at 3.5, 3.35 and 3.32, and have thus indicated, *inter alia*, that they perhaps respect their superiors because of factors other than formal authority alone. It thus appears that there is more genuine acceptance of superiors at higher levels than that shown by lower-level managers.

Coming to the second dimension of this section — *viz*, the behaviour of superior as perceived by the subordinate, we have to examine the responses

TABLE 10

Number of Salary-Sub-groups (N = 4)	Ranks		d	d <sup>2</sup>
	7(a)	9(a)		
(i)	4	4	0	0
(ii)	2	3	1	1
(iii)	1	1	0	0
(iv)	3	2	-1	1
				$\Sigma d^2 = 2$

$$r_s = 1 - \frac{6 \Sigma d^2}{N^3 - N}$$

$$= 1 - \frac{6 \times 2}{64 - 4} = 0.8$$

Critical value of  $r_s$  (for  $N = 4$ , at  $p = 0.05$ )  
= 1.000

to questions 3, 6 and 9 of Part A and question 8 of Part B. We have found from responses to item 3 of Part A that all 8 subsets unanimously agree that "managing in this organisation is more directing than convincing". No subset has shown 'strong agreement'. One wonders whether genuine commitment from the unconvinced subordinate would not be the first casualty in such a state of affairs. It could well be that in this organisation, leadership-style is authoritarian and task-oriented. Responses to item 6 of Part A show that people are generally 'undecided' as to whether the superior is more a 'judge' than a 'helper',<sup>8</sup> indicating a hesitation in deciding whether leadership-style is undemocratic and unsympathetic to the individual. Only one group — i.e., salary subset (iii) — has a weighted average score of 3.5 and indicates that the superior is more a helper than a judge.

Against item 9 of Part A, an aggregate score of 2.7 indicates that the superiors may after all be enjoying a modicum of respect by their efforts to make their subordinates more effective in their work. This may be an encouraging feature because the individual's on-the-job effectiveness is taken care of through the supportive behaviour of his immediate superior. But a closer examination reveals that a very convinc-

ing reply has emerged only from salary-subset (iii) which shows a score of 1.75, somewhere between 'strongly agree' and 'agree'. A less convincing, yet positive response has emerged from subset (ii) against tenure which shows a score of 2.26.

The 'undecided' character of aggregate responses to questions 8A and 6A thus indicates general ambivalence about the image of superiors. This may be partly due to the nature of the questions themselves, and the resultant difficulty in conceptualising. Replies to questions 2A, 3A, and 9A, however, seem to tie up more meaningfully. While managing is quite clearly seen as 'directing', this seems to be associated mildly with the superiors' competence (for only then they may 'direct') and this, in turn, is perceived as a whole to improve the respondents' job-competence. An extended dimension of a superior's concern for a subordinate's on-the-job effectiveness — *viz*, his long-term career — has been highlighted in Q 8 of Part B. For convenience, the main points are reproduced in Table 3.

Table 3 is quite revealing. All eight groups feel that the superior's concern for a subordinate's career should be much higher than it is now. While the scores on questions in Part A are not quite comparable with those in

TABLE 11 (Q 3B)

"Degree of influence in setting own objectives"

Item	Salary				Tenure				Total
	(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)	
(a) What is	3.25	2.9	4	3.67	3.3	3.26	3.67	2.6	3.2
(b) What should be	4.13	4.4	4.25	4.5	4.7	4.1	5	5	4.3
(c) How important	5.2	5.3	6.25	5.8	5.35	5.42	6	5.4	5.375
(d) (b) — (a)	0.88	1.5	0.25	0.83	1.4	0.84	1.33	2.4	1.1



TABLE 12 (Q 4B)  
*"Degree of influence over means of achieving objective"*

Item	Salary				Tenure				Total
	(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)	
(a) What is	3.1	3.0	3.25	3	2.9	3.32	3.5	2	3
(b) What should be	4.7	4	4.5	6	4.6	4.4	5.7	5.8	4.8
(c) How important	5.8	5.6	6.5	6.5	5.8	6	6	6	5.85
(d) (b) — (a)	1.6	1.0	2.25	3	1.7	1.08	2.2	3.8	1.8

Part B, yet the response pattern shown in Table 3 does not seem to extend the earlier indication of superior's concern for current in-the-job effectiveness to the long-term concern for career development. While salary subset (iv) is most charitable with the feeling that improvement should be of the order of 52.6 per cent, the figures are much higher for others; and the aggregate relative deprivation is 100 per cent in comparison with the present level. It is important to realise the significance of the very high 'd/a' ratios for subsets (iii) and (iv) under the 'tenure' column. These two groups are likely to include those managers who, despite long tenures in the firm, have not seen any worthwhile improvement in their salary and career prospects. For any change programme these managers could be a major brake.

The fact that individuals attach very high importance to the superiors' concern for the subordinates' career (the aggregate score against tenure is 6.24) may not be explained merely as an act of overdependence. It could rather be seen as a healthy desire among subordinates for the fulfilment of their legitimate personal goals. Indeed, a man's career-plans and expectations are often a reflection of his self-image. The superior's concern for his career indirectly strengthens this self-image and also paves the way for a more meaningful relationship between the individual and the organisation. Moreover, in Indian conditions, of poor inter-organisational mobility and delayed first-employment opportunity for most, such a tendency on the part of subordinates seems to be quite natural too. Lastly, revealed and perceived concern for long-term career aspirations within or outside this organisation of subordination is likely to provide more depth in the superior's other-than-formal organisational sanction. In order to help such concern to flourish, suitable and structured managerial approaches are a primary requirement. Without them, only

verbal platitudes tend to be the supreme management style.

#### IV

#### Performance Appraisal

So far, we have been focusing our attention on the inter-related concepts of 'influence' and 'authority', some of their behavioural ramifications, and a few of their underlying sanctions. To recapitulate briefly, authority is a structural concept representing positional power which an organisation creates to ensure that various role-incumbents adhere to the organisationally determined paths and goals. In reality, such adherence is also supported by 'inducements' which tend to reward acts of conformity and punish acts of deviance. The authority-structure is thus invariably linked with some form of reward-punishment system.

But literature on organisational behaviour shows that the reward-system continues to be a very thorny issue — both from the viewpoint of design and of implementation. The central ideological problem is the seemingly eternal conflict between conformity to organisational expectations and the demands of individualism. Much less a problem ideologically — but definitely the biggest problem operationally — is the manner and extent of linkage between rewards and performance. Two commonly held precepts in this area are now being systematically investigated: one is that rewards have to be pecuniary in nature, and the other is that performance-appraisal subserves the reward-system. We shall here dwell on the second of these suppositions.

The studies of Meyer, Kay and French have drawn attention to the 'split-roles' in performance-appraisal, and have shown that the individual himself has a conflict of objectives between his desire to maximise extrinsic rewards and his demand for accurate and helpful feedback about his performance.<sup>9</sup> But a more serious source of conflict lies in the divergence between

individual and organisational goals, as has been very aptly summarised by Porter.<sup>10</sup> Although in the slightly different context of appraisal interviews, Maier too has drawn attention to the conflicting relationships between various dimensions of appraisal plans, the management development goals, and manpower and reward data objectives are independent of each other, according to Maier.<sup>11</sup>

Another study by Spriegel shows the multiplicity of functions served by performance-appraisal in 357 firms:<sup>12</sup>

Purpose	Number of Firms
Counselling	300
Promotion	298
Training and development	265
Considering retention or discharge	240
Salary administration or merit increase	237
Bonus payments	54
Profit-sharing payments	14

Besides these individual aspects of performance evaluation, one of the present authors has observed certain other critical problems in this area in the Indian context — e.g. perceived inequity in the reward-performance nexus between functions like production and marketing, between one product group and another (facing sellers' and competitive market conditions respectively), between a technically qualified *vs* a generalist assessor and so on.<sup>13</sup>

From our questionnaire, one may wish to specifically examine the responses to Q 10, 13 and 15 of Part B. The responses to Q 13 are first summarised below.

Question 13 of Part B records the individual's perception about the reflection of his performance on rewards and punishments. Table 4 shows that, while the aggregate score against (a) is 2.7, that against (b) is 5.86, signifying an aggregate dissatisfaction of 3.16. This aggregate dissatisfaction seems to be quite representative because four subgroups out of eight have values more than 3.16 and four less than 3.16. Subset numbers (i) and (ii) against 'salary' and subset numbers (iii) and (iv) against 'tenure' have



TABLE 13 (Q 1A)  
"Managers in our organisation are as effective as their potential warrants"

Item	Salary				Tenure				Total
	(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)	
Weighted average score	2.625	3.0	2.25	3.3	2.7	2.95	2.5	3.4	2.85

scores of 3.44, 3.53, 3.47 and 3.6 respectively, against item (d) making it highly probable that those with longer years or those in lower echelons would like to see a more direct relationship between performance and the reward-system. Once again we come up with evidence that long tenure managers are often likely to be a frustrated and cynical lot; of all the eight subsets the last subset in tenure column has highest relative deprivation of 3.6.

Many authors, including Meyer *et al*, have, however, argued against a direct linkage between appraisal and rewards. One forceful argument is that such a connection could further throttle the downward communication of performance-evaluation because superiors would like to avoid sensitive and controversial issues. As so often happens in reality, performance-appraisal is in effect an evaluation of personality traits, and a superior will be all the more embarrassed if a disgruntled subordinate, who thinks he has been deprived, demands an explanation. In certain Indian organisations, the downward communication is so totally non-existent that the annual appraisal is called the 'Annual Confidential Report'.

The lack of communication, however, has a significant effect upon the morale of the subordinate, one of whose persistent needs is to know where he stands. When this need is not fulfilled the subordinate is likely to develop 'anxiety' which reflects itself in reduced commitment to work. Question 10 of Part B addresses itself specifically to this aspect and the answers to this question are summarised in Table 5.

The above figures reveal in no uncertain terms the importance attached by people to this particular aspect of communication. Against (c) above, the scores are consistently high, the aggregate being 6.6. Against the parameter of 'tenure', the group of people who have the longest association with this organisation has shown a score of 7. Significantly, this group has responded with a score of 1, the lowest possible, against 'a' above. And, once again

this group has revealed the highest deprivation score. The aggregate score against 'a' is 2.3 — showing that the superior's communication to the subordinates of the past year's evaluation is at a very low level. The slight variance among the sub-group scores against 'a' above suggests that some subordinates enjoy the trickling down of some additional information, possibly because their superiors are a little more informal than others. The fact that one sub-group has revealed a score of '1', is a very strong hint that there is no structured and formally accepted channel for this vital element of communication to flow. Common-sense suggests that the informal trickling down of information may take place when the performance-evaluation is favourable for the subordinate. In the other cases, when the evaluation is unfavourable, it may be embarrassing for the superior to share with his subordinates the results of performance evaluation. In a separate study conducted by us, around 75 per cent of 250 respondents in a public sector company wanted a discussion of the appraisal 'always and most positively', while around 18 per cent desired such a discussion 'only when the appraisal is unfavourable'.<sup>14</sup> It may be significant that in the above study not a single respondent wanted such a discussion, 'only when the appraisal is favourable'.

So much for the communication aspect of performance evaluation. Yet another important issue is the relationship between job performance and opportunity for self-development. Q 14 of Part B intends to explore this issue and the answers are summarised below.

Successful functioning of an organisation depends, in the ultimate analysis, on meaningful integration of an individual's objectives with those of the organisation he serves. Self-development is a legitimate objective of many individuals. When job-performance as desired by the organisation simultaneously facilitates such self-development, we have the possibility of harmonious integration of individual and organisational objectives. Such, however, may not be the case as suggested by our respondents. Table 6 shows that, on the whole, the present level of opportunity for self-development (i.e., learning new skills, or techniques or job-types) is having a score of 3.3, while the general opinion is that it should be at a level of 6.1. The importance attached to self-development has an aggregate score of 6.4. If one examines the scores of the salary sub-groups then one finds that those in the lowest salary slab (supposedly in the lowest echelon of the organisational hierarchy) emerge with the lowest score of 2.75 against 'a' above while, those in the highest salary-slab (and possibly in the highest rungs of the hierarchy) have the highest score of 4 against 'a'. The middle management has scores of 3.5 and 3. The scores against 'd' (i.e., the difference between 'what should be' and 'what is') are also worth consideration; the lowest level having a score of 3.5 and the highest level showing a score of 2.1. These scores suggest two hypotheses, viz, (i) that opportunities for self-development may be relatively the least adequate, in terms of their aspirations, for those who are most anxiously looking for it, in terms of their upward mobility in the organisation, resulting in comparatively higher scores against 'd'; and (ii) whatever may be the hierarchical level, the need for self-development still persists in an individual and the importance attached to it is consistently high, as revealed by the scores against 'c' above.

TABLE 14

Questions	Table No	Scores against 'd'	
		Sub-group (iii) of Salary	Sub-group (iv) of Tenure
8, Part B	3	3.5	3.4
13, Part B	4	3.0	3.6
10, Part B	5	4.25	5.8
14, Part B	6	2.75	3.0
1, Part B	7	1.5	3.8



In terms of 'tenure' a similar conclusion might be suggested if one examines the sub-group responses against 'years spent in the organisation'. Those who have spent the maximum period, i.e., sub-group (iv), show the lowest scores, comparatively speaking, against 'a', 'b' and 'c', the scores being 2.6, 5.6 and 6, respectively. Data in Table 6 possibly do reveal a pattern which could suggest that the predilection for self-development becomes progressively weakened with age. The score of 2.6 against (a) suggests they may have had the least opportunities for self-development hitherto. Consequently, their perception about its future extent or importance is also at a lower pitch.

## V

### Objectives

It is almost axiomatic that objectives give to the organisation a sense of direction, to its members a sense of purpose and, when fulfilled, a sense of achievement. As Peter Drucker puts it succinctly: Management in successful organisations has always been Management by Objectives.<sup>15</sup> But, then, one may borrow a phrase from Levinson and ask: Management by whose objectives?<sup>16</sup> It is indeed a pertinent question. Following Cyert and March we know that an organisation finally is composed of people who may have a coalition of very divergent objectives.<sup>17</sup> Individual needs apart, the process of differentiation, as explained by Lawrence and Lorsch,<sup>18</sup> may fore-ordain different objectives for different segments in the same organisation. The task of MBO is to probe into this medley of objectives and to see to it that these individual and segmental objectives could be reconciled to the organisational objectives. In other words, MBO believes that the Skinnerian rat (= individual) may indeed get its much needed morsel of food (= individual objective) while pressing the organisation-lever (= organisation objective).

In the present survey, there are a number of questions related to objectives. These are 4 and 10 in Part A, and 1, 2, 3, 4, 5 and 15 in Part B. Tables 7, 8 and 9 summarise the responses to some of them.

Tables 7, 8 and 9 convey a lot of messages. Table 7 suggests that orga-

nisational members would like to have much more clearly defined performance-objectives than they have now. However, two sub-groups, viz, sub-group (iii) against salary and sub-group (iii) against tenure — i.e., those managers who are immediately below the top management — stand out from the rest with scores of 1.5 and 1.8, respectively, against 'd'. It is important to note also that the two lowest groups in both salary and tenure columns show the lowest scores against (a). This could be an indication as well as source of frustration and apathy among the youngest managers. Next, the respondents have shown their strong preference for participative management by revealing, in Table 8, their fairly consistent accord that "the individual's objectives should always be set in the relevant group-setting". The aggregate score of 1.81 means slightly more than just 'agreeing' which in our scale had a score of 2. Having said so much, the respondents then reveal in Table 9 their perception about the present level of participation before objective-setting and their ratings about what it should be. There is a subtle difference between Table 8 and Table 9, because individual objective-setting in a group (as in Q 4 A) is different from individual objective-setting after a group-exercise (as in Q 2B). In the literature on MBO, Humble and others have described objective-setting as a one-to-one process, involving the superior and the subordinate only, who formulate mutually acceptable objectives.<sup>19</sup> However, one of the present authors has argued elsewhere that objectives can also be set in a group after this group has formulated the results-involvement matrix in their KRA-exercise.<sup>20</sup> It has been found to be well-received in some organisations as a useful first step before objective-setting for individuals in a group situation.

Moreover, Table 9 shows once again that, whereas subsets (i) and (ii), under both salary and tenure columns, experience the least amount of pre-goal-setting group participation (including peer-level participation), group (iii) on the other hand shows the highest score against (a). This repeats the phenomenon in Table 7. The relative deprivation of this group is also least in both Tables 7 and 9. This may indicate that, possibly, the greatest amount of work and payoff for MBO

will lie with groups (i) and (ii).

In any case, one should not miss the importance of participative objective-setting in the successful implementation of MBO, where participation means peer-level participation besides man-boss participation. It is also our contention that such peer-level participation lends clarity to the individual objectives and reduces interpersonal confusion and misunderstanding — especially when the structured results involvement matrix is used. When one compares Table 7 with Table 9, one finds that in the aggregate the respondents desire an improvement of 89.44 per cent in the clarity of performance-objectives, while they think that group-participation should increase by approximately 164 per cent. If one assumes that participation is a causal variable leading to increased clarity of performance-objectives, then one may infer that an improvement of 89.44 per cent in clarity will be made possible through an improvement of 164 per cent in participative objective-setting. Statistical tests on the observed results do not however suggest much correlation between the scores of Tables 7 and 9. The Spearman's rank-correlation ( $r_s$ ) is highest at 0.80 for the scores of 7 (a) and 9 (a) against salary sub-groups, and similarly for 7 (b) and 9 (b). The value of  $r_s$  is however not statistically significant at  $P = 0.05$ . Table 10 shows the calculation of  $r_s$  against item (a).

Participation may, however, be of many kinds and in different degrees. An organisation may thus have participation in information-sharing only, or participation in taking operational decisions, or participation at the level of policy-making. We have sought to highlight some of these facets of participation in some questions, the responses to which are summarised in Table 11.

When decision-making is decentralised, it results in an increased autonomy for those at the lower echelons of the managerial hierarchy. In contrast to classical bureaucracy, where managers are handed over a specific set of tasks, devised by a supposedly omniscient top-management, the managers may formulate their own objectives and commit themselves to their attainment. It needs to be seen that these objectives are integrated through some mechanism, but no one now denies the manager his option to at least indicate



his preferences and priorities. The influence that he enjoys over setting his own objectives may thus be taken as a measure of the extent to which decentralisation has permeated an organisation. Table 11 shows that, against item (a), the aggregate score is 3.2, with only two out of eight sub-groups being below this score with scores of 2.9 and 2.6. Not a drastic change of present circumstances has, however, been desired by the respondents, as we can see that against item (b) the aggregate score is 4.3. Here again, only two sub-groups out of a total of eight are below the aggregate, with scores of 4.13 and 4.1. The aggregate score against 'd' is 1.1 which is about 34.4 per cent of the aggregate score in 'a'. One may conclude that the respondents are moderate about their demand for autonomy. In any case 'decentralisation' is a neutral concept so far as organisational success, generally speaking, is concerned. While one organisation may be ideally suited for it, another need not. Lastly, we feel that data in Table 11 may be interpreted independently of data in Table 7 above. The latter indicates only the extent of availability of performance-objectives. But Table 11 assumes whatever objectives are available, and it goes to explore the manager's own say in those objectives.

We now come to Table 12, where influence on the means of attaining objectives has been highlighted. One would agree that participative objective-setting in MBO would be an abortive exercise if not simultaneously complemented by an exercise on how these objectives are going to be implemented. It is precisely for this reason that, in MBO, 'objective formulation' is followed by 'action plans' which attempt to take care of organisational resources and their equitable distribution. Conflict may often arise in this area, as is usually evident in the case of sharing common facilities. Enthusiasm initially generated by MBO may be dissipated if adequate resources are not available for achieving objectives. The role of participation and autonomy cannot be over emphasised here. Table 12 shows that, at present, the influence over 'means' is at an aggregate score of 3, while the aggregate score against 'b' is 4.8. The overall score against 'd' is 1.8, with only two sub-groups being below this with scores of 1.0 and 1.08. If we leave out these two sub-

groups [viz, (ii) against 'salary' and (iii) against 'tenure'], then we find that relative dissatisfaction increases steadily both when one rises in the organisational ladder and as one spends more and more years. Those who have spent the longest years in this organisation have the highest score of 3.8 against 'd'. They are followed by those in the highest salary bracket with a score of 3. It appears that those who are usually taken to be the most powerful or influential members of the organisation do not have the same notions about themselves. They feel that they should have much more influence over the means of achieving their objectives. We find here a fruitful line of enquiry into the dichotomy between 'absolute power' vs 'perception of power'. For, one interesting result is that subsets (i) and (ii) in both salary and tenure columns show much less relative deprivation compared to subsets (iii) and (iv). This is principally because their (i and ii) perception of 'what should be' is more conservative than that of the rest (iii and iv). The latter seem to feel that the degree of influence over means is far less commensurate than their status or tenure warrants.

Finally, if the 'Total' columns of Tables 11 and 12 are compared, another significant point emerges. The relative deprivation in terms of influence over own objectives is much less (1.1) than the same perception regarding influence over means (1.8). Although this seems surprising on paper, yet it indicates a fairly widespread organisational reality. Unless the relative deprivation on the latter score is systematically reduced and brought at least on par with the former, the MBO approach cannot hope to meet with success.

## VI

### Effectiveness

We have tried to explore above some of the elements which finally make or mar an organisation. In the final analysis, the effectiveness of an organisation depends on the deftness with which managers utilise their authority in motivating subordinates to achieve individual and organisational goals. The use of the word 'effectiveness' deserves a passing mention. Another has used it in his definition of 'management control' and has elsewhere drawn its dis-

inction from the engineering concept of efficiency.<sup>21</sup> In MBO its use is specially appropriate since 'effectiveness' reflects the success with which one attains desired ends.

The first question in Part A may now be referred to. The responses are summarised in Table 13.

The aggregate score of 2.85 on a 5-point scale, where 3 denotes 'undecided', really does not reveal much — excepting the hesitancy of the respondents in taking a clear stand. The highest score of 3.4 in sub-group (iv) against tenure shows slight disagreement with the statement of Q 1A. The lowest score of 2.25 in sub-group (iii) of 'salary' denotes fair agreement. We have compared in Table 14 the scores of these two sub-groups against item 'd' (i.e., relative deprivation of some of the questions).

Without going into statistical tests, one may pose the question: Is it not possible that salary sub-group (iii) has a lower score of 2.25 in Table 13 above, compared to tenure sub-group (iv)'s score of 3.4, because it has a consistently lower score of 'd' against selective intermediate variables, as revealed by Table 14, with the minor exception of Q 8B? It is interesting, however, to note that sub-groups (iii) in both salary and tenure columns in Table 13 show the greatest relative agreement with the statement compared to other sub-groups in the two parameters. On the other hand, relatively strongest disagreement is revealed by sub-groups (iv) under both parameters. Thus, it is the senior-middle management group, both salary and tenure wise, which appears to feel as being rather more effective than the other groups. Tables 3, 4, 5, 6, and 7 may be seen once again to interpret this phenomenon.

## VII

### Conclusions

Before we end, a few more points emerging out of the investigation should be highlighted.

(1) Response to Q 5 of Part A shows that managers, as a whole, felt that there probably was more criticism for their failure than there was praise for successes. This aspect has been discussed by us in an earlier paper.<sup>22</sup> The weighted aggregate score is 3.58. This may result when management is more



'directing' as seen from responses to question 3A, while 'objectives' as well as 'means for achieving them' are not so clearly defined. In this connection, we examined the responses to Q 9 of Part B where the superior's capacity to deal with his subordinates has again been highlighted as an area where improvements are desirable. For Q 9B the aggregate score against (a) is 4.1, while that against (b) is 6.22, showing a relative deprivation of 2.12. This is the least for salary sub-group (iii) where (b) — (a) is only 1.25.

(2) Responses to Q 11 of Part A show a weighted aggregate score of 2.78 regarding "manager's intention to leave the organisation at the next available opportunity". While aggregatively this is more on the verge of 'undecided', subset (iv) in both salary and tenure columns shows scores of 3.5 and 3.6, indicating that they disagree with the suggestion of leaving the organisation. All the other subsets agree with varying intensities to the suggestion of quitting the organisation. Combined with the perception of being more criticised than praised, this tendency to leave the organisation shows a state of rather poor morale especially at lower levels in the organisation. MBO, or any other management development programme should once again, therefore, focus on these groups of managers.

(3) We have discussed question 14B previously. In this context one may also examine Q 6B, which is a thought-provoking commentary on the utilisation of one's special knowledge, experience and talents by the organisation. On the whole, the improvement desired on this score is 6.2 — 3.57, i.e., 2.43. The scores against 'd' are however very high for salary sub-group (i) ( $d: 6.1 - 2.94 = 3.16$ ) and tenure sub-group (iv) ( $d: 6.2 - 2.8 = 3.4$ ). The failure of the organisation to utilise the special skills/talents of someone who is still at the lower echelons may be amenable to some explanations. But such lapse in case of those who have spent the maximum number of years with this organisation demands serious investigation and attention. At the risk of repeating the trite, we cannot but mention that an organisation's success finally depends on the utilisation of its human resources — a dimension which has been highlighted in this diagnostic study.

## Appendix

### QUESTIONNAIRE

#### PART: A

(All questions have a 5-point scale. The scale is not shown here.)

- 1 Managers in our organisation are as effective as their potential warrants.
- 2 The superior's authority over subordinates in this organisation is based on the former's competence.
- 3 Managing people in this organisation is more directing than convincing.
- 4 Individual's objectives should always be set in the relevant group settings.
- 5 On the whole my successful performance receive relatively more praise, while my failures get less criticism.
- 6 My superior is more a judge than a helper.
- 7 In the work situation, if my subordinates cannot influence me, then I lose some influence on them.
- 8 I respect my superior because of his position of authority.
- 9 I respect my superior because of his ability to make me more effective in my work.
- 10 MBO should be introduced in our organisation at this point in time.
- 11 I would leave this organisation at the next available opportunity.

#### PART: B

(Each question has 3 parts, viz, a, b and c. Answers are to be recorded on a 7-point scale. The scale is not shown here.)

- 1 Availability of clear and distinct performance objectives.
- 2 Group participation preceding the setting of individual objectives.
- 3 Degree of influence in setting our objectives.
- 4 Degree of influence over means of achieving objectives.
- 5 Degree of influence in selling superior's objectives.
- 6 Utilisation of my special knowledge or unique experience and talents by the organisation.
- 7 Opportunity for knowing divisional goals or plans.
- 8 Superior's concern for my career.
- 9 My superior's capacity to deal with his subordinates.
- 10 Superior's communication to me of the evaluation of my past year's performance.
- 11 Extent of discretion available to my organisation's top management in the flexible use of rewards (promotion) and punishment.
- 12 Degree of stability in the manning of the organisational position immediately above me.
- 13 Reflection of my performance in rewards and punishments.
- 14 Opportunity for self-development (i.e., to learn new skills or technique or job types) along with job performance.
- 15 Subordinates' influence over setting of my objectives.

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# Commercial Orientation of Industrial Entrepreneurs in India

J H van der Veen

*Small-scale industries are widely considered to be the 'seedbed' or training ground where newly emergent industrial entrepreneurs learn their skills.*

*This paper describes two major types of small industrial entrepreneurs — those adopting a commercial and those adopting a production orientation — and discusses the economic factors which favour the emergence of the less appropriate, commercially-oriented, industrial entrepreneurs.*

*The author also discusses some of the ways in which the 'quantitative restrictions' method of implementing an import substitution strategy reinforces these economic factors and spells out some policy implications of the various observations offered in the paper.*

STRATEGIES of industrialisation often depend upon the emergence and development of appropriate entrepreneurial services. Considerable policy-oriented research has been conducted on how best to increase the supply of these services. However, most of this research has been limited to an analysis of quantitative variables: the rate of emergence and the rate of success of new entrepreneurs.<sup>1</sup> The quality of the resulting services has not been examined adequately.<sup>2</sup>

The import substitution strategy of industrialisation is in part a response to a perceived shortage of entrepreneurial services.<sup>3</sup> Such a strategy reveals, to prospective businessmen, established markets of known dimensions; this greatly simplifies the tasks of identifying and exploiting new product markets. At the same time, an import substitution strategy weakens incentives to accomplish other equally difficult entrepreneurial tasks.

There is now little doubt that the quantity of entrepreneurial services and the rate of success of new entrepreneurial ventures increases in response to improvements in the economic environment.<sup>4</sup> However, particularly in countries which are committed to an import substitution strategy of development, the nature of emerging entrepreneurial services is often not consistent with national requirements. Policy-oriented research on how best to induce appropriate entrepreneurial behaviour has become critically important.

Small-scale industries are widely considered to be the 'seedbed' or training ground where newly emergent industrial entrepreneurs learn their skills.<sup>5</sup> Accordingly, in this brief paper, I will focus on small-scale industrial entrepreneurs. First, I will describe two major types of industrial entrepreneurs; those adopting a commercial and those adopting a production orientation. Second, I will discuss

the economic factors which favour the emergence of the less appropriate, commercially-oriented, industrial entrepreneurs. Third, I will discuss some of the ways in which the 'quantitative restrictions' method of implementing an import substitution strategy reinforces these economic factors. Finally, I will discuss some policy implications of the various observations offered in this paper.

## COMMERCIAL VS PRODUCTION

### ORIENTATION

Many authors distinguish between industrial entrepreneurs who are concerned primarily with commerce and those who are concerned primarily with production.<sup>6</sup> Industrial entrepreneurs who have adopted a commercial orientation are interested in quick gain; they stress financial flexibility.<sup>7</sup> Industrial entrepreneurs who have adopted a production orientation are interested in long-term ventures; they tie up a substantial portion of their capital in fixed assets.

Peter Kilby identifies 13 specific entrepreneurial functions which he classifies under four headings: exchange relationships, political administration, management control, and technology. He writes:

"...with a few exceptions, entrepreneurial performance in those roles involving 'exchange relationships' and 'political administration' is vigorous and effective. On the other hand, entrepreneurs typically do not apply themselves with equal intensity or skill to their tasks in the realm of management control and technology. Deficiencies in these latter areas represent in many instances the operational bottleneck to indigenous industrial development."<sup>8</sup>

Vigorous and effective performance in roles involving exchange relationships and political administration characterises a commercial orientation and is appropriate to traders. A production orientation appropriate to manufac-

turers must supplement this commercial behaviour with vigorous and effective performance in roles involving management control and technology.<sup>9</sup>

Thus the characteristics and characteristic roles of industrial entrepreneurs are well known. There is considerable evidence to suggest that entrepreneurs in India are quite willing to tie up their capital in long-term ventures and to fill the several roles appropriate to production orientation; there is also considerable evidence to suggest that those who are most willing to do so are among the least successful.

Technological progress is a source of windfall gain that should be encouraged.<sup>10</sup> However, as McCrory points out, industrial entrepreneurs who do not have sufficient financial flexibility cannot capture the windfall gains arising from their own technical skills and innovations. Ironically, the continuing search for windfall gains through technological change contributes to the business failure of McCrory's industrial entrepreneurs. It is the trader, with his liquid capital, who takes the profits. Technical progress is a windfall from the industrial entrepreneur.

Examination of the sharply discontinuous growth patterns of the entrepreneurial enterprises studied by Berna reinforces this conclusion.<sup>11</sup> Berna's entrepreneurs place a high premium on entrepreneurial mobility. Success comes to those who give up small but steady profit opportunities for the infrequent but large profit opportunities of a commercial orientation. Financial flexibility is necessary if entrepreneurs are to be able to take advantage of these infrequent opportunities.

In short, entrepreneurial behavior widely considered appropriate to industrial development is not well rewarded. There are two fundamental and related environmental factors that impinge on the decision processes of small-scale industrial entrepreneurs.



The first refers to the production characteristics of small-scale industries. The second refers to the peculiar logic of the commonly used quantitative restrictions means of implementing an import substitution strategy.

Many industrial entrepreneurs are aware that the vitality of their businesses depends on their skill in locating low priced material inputs. Thus Lele argues that "... examination of the nature of variable costs of rice mills emphasises the fact that rice milling is predominantly a trading operation involving mainly storage and little value added in actual processing."<sup>13</sup> Rice mills throughout India are characterised by low capacity utilisation and high operational flexibility. Mill owners respond to strong incentives to use their relatively great operational flexibility to conduct profitable short-term commercial operations.

Desai and Murty apply the same argument to the Saurashtra groundnut industry. "Because of a high raw material cost ... the efficiency of a firm depends on the procurement of the raw materials at lower prices. This, to a large extent, is dependent on the manoeuvrability available to the firm."<sup>14</sup> Raw material costs account for roughly 92 per cent of total costs. In the fluctuating groundnut market, trading skills are highly rewarded.

Small-scale firms dominate both the rice milling and the oil extraction industries. Material input costs as a share of total costs are exceptionally high and are inversely related to firm size. As a result, expected returns to commercial activities are exceptionally high, and rise as firm size falls. Small-scale industries, especially agro-industries and other simple one process manufacturing activities, are characterised by relatively high material input cost to total cost ratios.<sup>15</sup> Accordingly, the expected returns to an intensive market search for low cost material inputs are high for a great many small-scale industrial entrepreneurs.

At the same time, opportunity costs of searching for material inputs are particularly low for enterprises which are not capital intensive, for the opportunity costs of idle machinery and equipment are low. Also, if enterprises are exempt from labour legislation then the opportunity costs of idle workers are low. In general, small-scale enterprises are not capital intensive and are exempt from much labour legislation.<sup>16</sup> Accordingly, these small-scale enterprises have a comparative advantage in competing for low cost material inputs.

Each entrepreneur must decide individually on the optimal pattern of allocating time, energy, skills, and other resources to searching for low cost material inputs. The optimal market search effort depends on the expected returns to, as well as the opportunity costs of, that effort. Of course, the returns to and the opportunity costs of market search vary widely among enterprises. In general, behaving in a manner consistent with their comparative advantage, small-scale industrial entrepreneurs will invest relatively more resources in competing for low cost material inputs than will the managers of larger enterprises.

It does not follow that the prices paid by small-scale enterprises will be lower, in an absolute sense, than those paid by larger competing enterprises. Other strictly economic considerations — such as bulk purchasing — loom large. Political factors, associated with the decision to implement an import substitution strategy by using quantitative restrictions, also loom large.

The primary objective of an import substitution strategy is to industrialise rapidly while providing balance of payments support. Of course, import substitution strategies introduce distortions in the market incentive structure of the economy. *Ceteris paribus*, import substitution strategies create biases against industries with domestically produced inputs and against industries producing for export; they create biases in favour of industries which are capital intensive and in favour of industries producing for relatively well-to-do urban consumers; they tend to shift the terms of trade against agriculture and in favour of industry.

If the import substitution strategy is implemented by using quantitative restrictions, the government inevitably uses those restrictions in an attempt to accomplish a host of secondary objectives — such as encouraging capital goods imports or curtailing the economic power of large industrial firms. Considerable evidence suggests that an import substitution strategy, which relies on quantitative restrictions, soon degenerates into a system of unintended incentives which at least partially, frustrate the achievement of the objectives initially established. A quantitative restrictions regime "... seems to have an internal, self-contradictory logic all its own."<sup>17</sup> This self-contradictory logic encourages a commercial

orientation on the part of small-scale industrial entrepreneurs.

In the context of a forced-pace industrialisation process, many productive inputs will tend to be in short supply. Official efforts to ration these inputs will create opportunities for entrepreneurs to earn windfall rents.<sup>18</sup> Entrepreneurs will scramble to obtain administratively rationed inputs at prices often substantially below market clearing levels. The direct social costs of encouraging this kind of rent-seeking behaviour have been calculated by Krueger.<sup>19</sup> While the direct costs are high, there are indirect costs as well. Entrepreneurs who compete for windfall rents necessarily adopt a commercial rather than a production orientation. As a result, these industrial entrepreneurs place a premium on financial flexibility: they tend to hold in liquid form a disproportionately large share of their capital and they tend to accumulate disproportionately large inventories of key material inputs.

While the direct and indirect costs of competing for windfall rents are high, the dynamic costs may well be staggering.<sup>20</sup> If a quantitative restrictions regime at great cost teaches emerging entrepreneurs how best to earn windfall rents rather than how best to perform the tasks appropriate to industrial entrepreneurs, then a major goal of the import substitution strategy will not be achieved. Developing inappropriate entrepreneurial capacity may severely damage the entire industrialisation effort.

Competition for windfall rents is dominated by the politically well connected industrialists who operate relatively large enterprises. Some small-scale industrial entrepreneurs are in a position to compete with these industrialists for windfall rents; most are not.

Largely to offset the competitive advantages accruing to large-scale production, the Government of India long ago established a complex system of incentives to assist qualified small-scale industrial enterprises. In brief, the system attempts to ration administratively those productive inputs which are in short supply. The system creates opportunities for small-scale entrepreneurs to earn windfall rents. The system has evolved to such a degree that "... small-scale industry tends to revolve around economic shortages of products, reservations for small-scale industry and other government 'incentives'. Thus the corrupting influence of these 'easy money' strategies are evident on the small-scale entrepreneurs



and, in turn, these influences react on the genuine entrepreneurs of small-scale industry."<sup>21</sup>

The small-scale industrial entrepreneurs who manufacture plastic buttons in Gujarat state have argued that, as restrictions associated with an import substitution policy became more strict in the late 1960s and early 1970s, a production orientation became less well rewarded.<sup>22</sup> The entrepreneurial skills that were increasingly well rewarded included the ability to deal effectively with governmental bureaucrats in Ahmedabad and Delhi, and, in general, the ability to conduct business on a level of 'sophistication' characterised by evasion of taxes, falsification of records, and recourse to illegal markets.

These entrepreneurs were so concerned with business matters relating to the purchase of material inputs that they were able to pay little attention to any other aspect of industrial enterprise. The reason is clear: significant windfall rents accrued to those entrepreneurs who were able to obtain low cost material inputs through skilful manipulation of policy and people. Entrepreneurs unable to obtain windfall rents were forced to devote virtually all their energies to obtaining hitherto imported material inputs in the market, legally or illegally.

In general, the official response to situations like this is two-fold: first, the government clamps down on illegal black market activities and, second, believing the windfall rents accruing to commercial activities are signs of monopolistic conditions, the government enters the marketing business to cut the margins of alleged profiteers.<sup>23</sup> Thus, the Government of India engaged in marketing certain steel and other basic metal inputs demanded by small-scale industries. Familiar patterns were immediately established. Small-scale entrepreneurs with access to political power obtained windfall rents; others bid for the remaining quantities of material inputs the prices of which were forced higher as an immediate consequence of official intervention.

Politically well-connected small-scale industrial entrepreneurs find it profitable to devote considerable amounts of their resources to competing for windfall rents. They are not well prepared to purchase their material inputs in the market in the event their political connections fail. At the other extreme, many small-scale industrial entrepreneurs who are effective-

ly excluded from competing for windfall rents have a comparative advantage in searching for low cost material inputs in the market. Somewhere in the middle are the entrepreneurs who are discouraged due to weak political connections from competing for windfall rents, but who are disadvantaged, due to high opportunity costs of search when it comes to competing for material inputs in the open market. There is, of course, a broad continuum between these extremes. It is clear that the optimal market search effort depends not only on the expected returns and the opportunity costs involved, but also on the entrepreneurs' expectations of success in competing for windfall rents. The crucial observation is this: the availability of windfall rents reinforces the 'natural' tendency of small-scale industrial entrepreneurs to adopt a commercial orientation.

#### CONCLUSION AND IMPLICATIONS

It is clear that, in industrialising developing countries, a production rather than a commercial orientation should be encouraged. Due to the fact that their enterprises are generally materials intensive and that the opportunity costs of searching for inexpensive material inputs are low, small-scale industrial entrepreneurs are particularly susceptible to forces promoting a commercial orientation. At the same time, import substitution strategies of industrialisation based on quantitative restrictions very much increase the rewards to obtaining material inputs at low 'official' prices. Emerging entrepreneurs quickly learn the advantages of being politically well connected. In short, in many developing countries, the wrong kind of entrepreneurial skills are being learned in the small-scale industries 'nursery' for entrepreneurship.

It is plausible to argue that some developing countries, which in the past had ample supplies of entrepreneurs, recently should have 'discovered' a shortage of appropriate entrepreneurial services. A great many aspiring entrepreneurs have no doubt taken well paid posts as corporate managers, or, if trained in the small-scale industries sector, have learned that a commercial orientation is far more rewarding than a production orientation. In a very real sense, the lack of truly competent and constructive industrial entrepreneurs may be the unwanted result of an incentive structure exacerbated by strategic development

decisions.

One obvious implication of this discussion concerns efforts to promote ancillary industries. Ancillary relations with large factories can assure delivery of appropriate material inputs to small-scale enterprises. This feature of ancillary relations, given the perception that small-scale enterprises face great difficulty in obtaining raw materials, is generally considered a major advantage. While the perception is accurate, the conclusion is not. By entering into ancillary relationships, small-scale industrial entrepreneurs give up their ability to manoeuvre in the materials inputs markets in which profits are made. Their material inputs are purchased with the aid of, and at or cost known to, the managers of the large factories to whom they sell their products. Small-scale industrial entrepreneurs will not engage readily in ancillary relationships as long as the incentive structure of the economy reserves its greatest rewards for entrepreneurs who adopt a commercial orientation.

What can the government do to stimulate a more appropriate production, rather than commercial, orientation — especially among small-scale industrial entrepreneurs? The specific goal should be to increase the size of the expected stream of small but steady profits relative to the size of the expected stream of infrequent but large profits.<sup>24</sup> Two related policies are appropriate. First, when interfering with market processes, the government should discriminate on an economic basis. A quantitative restrictions regime discriminates on a political basis: those who cultivate political connections gain substantial advantages. From the economic point of view the attempt to ration goods fairly does not discriminate at all. Second, when devising its industrial assistance programmes, the government should consider weighting infrastructure improvements and institutional reform more than it has been weighted in the past. By effectively subsidising information on, for example, new market opportunities, newly available technologies, and alternative sources of material inputs, the government assists primarily those who can benefit most from lowered search costs. Furthermore, lowered search costs will reduce the price spread of material inputs. In effect, the government will be encouraging a more constructive, long-term production orientation.



In more general terms, the government should review, carefully and continuously, the implications for entrepreneurial behaviour not only of its strategic decisions but also of the means it chooses to implement those decisions. This review should be especially thorough if a quantitative restrictions regime is adopted, for the unintended incentives which result are both large and bewilderingly complex.

### Notes

[The views expressed in this paper are those of the author and do not reflect those of the institutions with which he is affiliated. The author acknowledges the helpful suggestions of J W Mellor, D R Sherk and E. Staley.]

- 1 In fact, as pointed by Koppel and Peterson, most studies direct themselves to the joint probability that entrepreneurs will emerge and that they will be successful. Koppel, B and R E Peterson, "Industrial Entrepreneurship in India: A Re-evaluation", *The Developing Economies*, XIII, 3, 1975.
- 2 In a study of the quality of newly formed entrepreneurial services in Pakistan, Papanek argued that entrepreneurs in the late 1950s were little concerned with efficiency in production. "This was sound profit maximising behaviour, since the returns from increased efficiency were likely to be less than from the promotion of new enterprises and from coping with and trying to evade government regulation." Papanek, G F, "The Development of Entrepreneurship", *American Economic Review*, LII, 2, 1962, p 51.
- 3 Ranis, G, 'Industrial Sector Labour Absorption', *Economic Development and Cultural Change*, XXI, 3, 1973 p 394.
- 4 Harris, J R, 'Some Problems in Identifying the Role of Entrepreneurship in Economic Development: The Nigerian Case', *Explorations in Economic History* VII, 3, 1970.
- 5 Staley, E, and R Morse, "Modern Small Industry for Developing Countries", New York: McGraw-Hill, 1965.
- 6 See, for example, Bhagwati, J N and P Desai, "India: Planning for Industrialisation", London: Oxford University Press, 1970, p 49; Berna, J J "Industrial Entrepreneurship in Madras State", New York: Asia Publishing House, 1960, p 217; and Oomen, M A, "Small Industry in Indian Growth: A Case Study of Kerala", Trivandrum: Mudralaya Press, 1972, p 173.
- 7 On the importance of financial flexibility to entrepreneurs, see Fox, G, "From Zamindar to Ballot Box", Ithaca: Cornell

University Press, 1969, and Singer, M, "When A Great Tradition Modernises", New York: Praeger Publishers, 1972.

- 8 Kilby, P, 'Hunting the Heffalump', in "Entrepreneurship and Economic Development", (ed) P Kilby, New York: The Free Press 1971, p 35.
- 9 One can distinguish between entrepreneurs who adopt a short-term commercial orientation from those who adopt a long-term commercial orientation. The former engage in speculation; the latter take into account long lasting, supply and demand patterns. In a similar manner, one can distinguish between entrepreneurs who adopt a short-term production orientation from those who adopt a long-term production orientation.
- 10 Krueger distinguishes between seeking windfall gains, which should be encouraged, and seeking windfall rents, which should not. Ideally, windfall gains accrue to persons who, for example, adopt better technologies or anticipate market shifts correctly. Windfall rents accrue to persons who, for example, win administratively rationed import licences. See Krueger, A O, 'The Political Economy of the Rent-Seeking Society', *American Economic Review*, LXIV, 3, 1974.
- 11 McCrory, J T, "Small Industry in a North Indian Town: Case Studies on Latent Industrial Potential", New Delhi: Government of India, 1956.
- 12 Berna *op cit*, p 15.
- 13 Lele, U J, "Food Grain Marketing In India: Private Performance and Public Policy", Ithaca: Cornell University Press, 1971, p 23.
- 14 Desai, D K and A G K Murty, "A Study on Solvent Extraction and Expeller Oil Industries", Ahmedabad: Indian Institute of Management, 1968, p 7.
- 15 Van der Veen, J H, "A Study of Small-Scale Industries in Gujarat State, India", Occasional Paper 65, Employment and Income Distribution Project, Cornell University (mimeo) 1973, p 44.
- 16 The value added/fixed capital ratio in Indian manufacturing falls sharply as the size of enterprise increases. See NCAER, "Study of Selected Small Industrial Units", New Delhi: Government of India, 1972, pp 8-10. Larger manufacturing enterprises must comply with detailed legal provisions covering employees' health, safety, and hours of employment; child and female labour; vacation benefits; and so on. As is well

known, the larger the enterprise, the more 'restrictive' is the labour legislation which applies.

- 17 Bhagwati, J N, and A O Krueger, 'Exchange Control, Liberalisation, and Economic Development', *American Economic Review*, LXIII, 2, 1973, p 424. See also Bhagwati, J N and T N Srinivasan, "Foreign Trade Regimes and Economic Development: India", New York: NBER, 1975. For early concrete examples of a domestic quantitative rationing system see, Ford Foundation, International Perspective Planning Team, "Development of Small-Scale Industries in India", New Delhi: Government of India, 1963.
- 18 Historically, windfalls have been related to the wide fluctuations in the production of agricultural commodities. Forced pace industrialisation has resulted in man-made opportunities which can be exploited in a similar manner.
- 19 Krueger, *op cit*, pp 293-294.
- 20 Entrepreneurs "...come to depend for their profits on government decisions, and so have formed the habit of devoting their efforts to obtaining privileges by pressure on the government rather than by cutting their costs. The new entrepreneurs have thus had a 'proprietary' concept of production far more than a spirit of enterprise in the true sense." From the forward to Little, I M D, T Scitovsky, M Scott, "Industry and Trade in Some Developing Countries", London: Oxford University Press, 1970, p xix.
- 21 Acharya, D 'Entrepreneurship Development', *Small Industry Bulletin for Asia and the Far East*, 11, New York: United Nations 1973, p 14.
- 22 van der Veen, J H, *op cit*, p 48.
- 23 It is worth making this point explicitly: although characterised by very broad price spreads, the inputs markets here discussed are competitive. Some entrepreneurs compete for windfall rents. Some entrepreneurs compete for low priced inputs in the open market. Others compete in both 'markets'. Rather than reflecting monopolistic trading activities, the price spreads reflect, in part, different transactions and information costs of competing entrepreneurs. Official efforts to ration material inputs exacerbate these price spreads and entrepreneurs compete for windfall rents as well.
- 24 It is assumed that entrepreneurs maximise an E, V utility function. If the expected value of the small but steady profit stream is increased, or if the variation of the infrequent but large profit stream is increased, there should be a shift away from a commercial and toward a production orientation.



# Structural and Control Problems in Credit Administration

S K Bhattacharyya

*The recommendations of the RBI Study Group for improving the manner and mode of commercial credit operations in India will not be substantially achieved unless new credit analysis skills, which are essentially managerial, replace the present financial analysis skills. This change demands considerable retraining and utilisation of skills on a purposive and pragmatic basis.*

*Given the spread and distribution of large loans as also the connotations of resource utilisation and risk, these skills are best utilised by constituting large commercial-cum-international banking branches in metropolitan and semi-metropolitan cities by weaning them from current main branch operations.*

*The creation of service groups to provide customer services at one focal point and the opening of special service branches for handling clearing work for other branches would substantially improve the effectiveness of the proposed credit administration process and structure.*

THE recommendations of the Reserve Bank of India Study Group on Bank Credit (in its report of August 9, 1975) represent a significantly different approach to credit planning and administration, which is bound to have a very significant impact on the operations of Indian commercial banks in the coming years. The fundamental changes recommended by the Study Group are being debated in public forums and private discussions, but the debate has centred around the manner and mode of computing credit and the quantum of credit to be made available rather than the several fundamental structural and control issues which are inherent in the recommendations. I propose to discuss some of these issues, so that they receive the required attention while the changes are being introduced for streamlining the credit operations of commercial banks.

The presentation that follows relates to the relatively large banks — with 100 or more branches — and to large borrowings — say Rs 50 lakhs and more. I consider this an appropriate canvas because borrowings of this order substantially cover the broad spectrum of credit operations affected by the RBI Study Group's recommendations. Furthermore, the intent is to initiate debate and discussion relating to these critical issues rather than to provide solutions.

Some of the major recommendations of the RBI Study Group are:

(1) The borrower's financial requirement to carry current assets, based on norms prescribed by the Study Group — calculated as the difference between all current assets and all current liabilities other than bank borrowings — should be bridged at

least upto 25 per cent from his own funds and long-term borrowings; the remaining 75 per cent could come from bank borrowings.

(2) The annual credit limit should be divided into (a) a loan comprising the minimal level of borrowings through the year and (b) demand cash-credit to take care of the fluctuating requirements, both of which are to be reviewed annually.

(3) To ensure that the cash-credit facility is used in a planned manner, the financing of such cash-credit should be based on quarterly budgeting, i.e., on a reporting system for operational purpose. The borrower has to submit quarterly forecasts of his operations, projected current assets and current liabilities, and projected sources and uses of funds. These statements will be on a rolling basis, in the sense that the actuals of the previous quarter will be compared with the estimates of the earlier quarter in analysing the forecasts for the current quarter.

(4) The proposed system of lending and style of credit should be extended to all borrowers having credit limits above Rs 10 lakhs in the banking system and the planning and information system should be introduced, to start with, for borrowers with a credit limit of Rs 1 crore and more from the entire banking system, and extended progressively to others.

(5) The mechanics of lending should include an examination of the borrower's total operational plan and also his past and current financial position. For fixing the overall credit limit, the borrowers should furnish at the end of each year operating and funds flow statements for the next year and a projected balance sheet as

at the end of the next year along with the application for advance or renewal.

(6) Bankers should move away from security-oriented lending to production-related credit, based on the economic viability of the borrower's future operations, with security serving a subsidiary but necessary role. This will require the banker to be in close touch with the borrower's operations.

(7) The funds flow statement will be the basis for determining the line of credit. The banker will be justified in laying down the condition that any material change, say of around 10 per cent of the figure projected earlier will require his prior approval.

(8) Since managerial competence is an important factor in the efficiency of operations, the banker should keep in mind that an appraisal of management may be essential, particularly in view of the emphasis on economic viability rather than on security alone. Once signs of difficulty appear, speedy action will be called for on the part of the banker; the banker may intervene even in management, if necessary in the interest of all concerned.

## BASIC ASSUMPTIONS

Some of the identifiable basic assumptions in the report are:

(1) Credit should be used as an instrument of economic development, channelling it to the production of socially desired goods and services.

(2) Sanctioning of bank credit should be based on the economic viability of the customer's operations and on its use for socially desired purposes rather than on security considerations alone.



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(3) In projecting the credit requirements, particularly large amounts, operational forecasts and estimates should be developed so that the banker and the borrower can agree about the amount of credit required on the basis of commonly shared data.

(4) Since borrowers will be assured of credit, provided their operations are financially and economically viable and their use of credit is in line with the priorities laid down, it will be necessary for the banking system, including RBI to develop a macro planning system which matches the demand for credit with the availability of funds and resources over the plan period.

#### IMPLICATIONS FOR BANKS

The broad requirements arising from the assumptions in the report and its recommendations are:

(1) Development of a planning and information system by the borrowers as well as the banking system.

(2) Development of appropriate structural mechanisms for processing and granting large credit.

(3) Design and proper administration of management control systems for carrying out the bank's operations effectively and efficiently.

(4) Reorganisation of large branches where such credit will be largely granted.

According to the RBI statistics,<sup>1</sup> the outstanding credit of scheduled commercial banks, as on the last Friday of December 1974, on advance to the manufacturing industry was Rs 4,703.88 crores representing 57.8 per cent of total bank credit granted. The comparative figures as at the end of December 1972 and December 1973 were Rs 3,193.88 crores and Rs 3,826.47 crores. Adjusted for bank credit to small-scale industry (which is governed by entirely different considerations), the outstanding credit to large units in the manufacturing industry, as on the last Friday of December 1972, 1973, and 1974, was as given in Table 1.

Commercial bank credit to large units in manufacturing industry increased by Rs 415.50 crores between December 1972 and December 1973 and by Rs 711.55 crores between December 1973 and December 1974. According to reports in the financial press, the rise in commercial and institutional advances of scheduled commercial banks during the financial year till January 9, 1976 was

Rs 1,450 crores.<sup>2</sup> Of this, Rs 340 crores were for food procurement, indicating that the increase in industrial (i.e., non-food) advances during this period, till January 9 was approximately Rs 1,110 crores, in spite of the considerable decline in prices of raw cotton and oilseeds as well as some manufactured goods. This highlights that advances of scheduled commercial banks to industrial units, particularly to large units, have been increasing at a very substantial pace in spite of government anxiety to contain and limit such credit. My thesis is that the ability of the banking system to channel credit of such large magnitude to productive and socially desirable uses will depend, a great deal, upon the effectiveness of the credit analysis process and the structural and control systems for credit administration.

A break-up of the credit granted by scheduled commercial banks to various sectors of the manufacturing industry is given in Table 3. In passing, it might be useful to note that the increase in bank credit has been particularly large for textiles, chemicals and chemical products, basic minerals, heavy engineering, and light engineering. At a somewhat different level, the increase in credit can also be partially attributed to two relatively new groups of claimants for large amounts of credit—high technology enterprises with a much larger scale of operations than traditional enterprises and large public undertakings. A more detailed analysis of the outstanding bank credit of scheduled commercial banks as on the last Friday of December 1974, shows that 54.9 per cent of Rs 3,661.67 crores credit to large units of the manufacturing industry was accounted for by advances of Rs 50 lakhs and more at 38 locations (Table 2).

The relevant details of advances of Rs 50 lakhs and more in 8 metropolitan and semi-metropolitan cities, 15 large business centres, and 15 locations for the disbursement of advances to large public sector units are given in Tables 4, 5 and 6.

Some interesting conclusions which

emerge from Table 2 are:

(1) Almost 60 per cent of the total advances to large (i.e., non-small-scale industry) units were accounted for by individual advances of Rs 50 lakhs and more.

(2) Of these large advances of Rs 50 lakhs and more, 80.6 per cent were disbursed in 8 metropolitan and semi-metropolitan cities.

(3) These 8 cities plus 15 large business centres and 15 locations for the disbursement of loans to large sector units (altogether 38 centres) accounted for 94.3 per cent of the large advances of Rs 50 lakhs and more.

(4) Collectively, the advances in metropolitan and semi-metropolitan cities accounted for approximately 47 per cent of all advances to units in the manufacturing industry other than the small-scale industry. The disbursements in all 38 centres (inclusive of the 8 metropolitan and semi-metropolitan cities) formed 55 per cent of these advances.

I will demonstrate later that these statistics are of great significance in the context of the RBI Study Group's recommendation — viz, that the appraisal for bank credit to units in the manufacturing industry based on projections and financial results, on a quarterly rolling basis, be initially limited to borrowers with a credit limit of Rs 1 crore and more (I have assumed that this will be extended subsequently to loans of Rs 50 lakhs and more).

#### NEED FOR CONTROL SYSTEMS

While the RBI Study Group made detailed prescriptions for large borrowers, regarding formats, process of planning, and information supply, it did not deal with the major issue of instituting appropriate management planning and control systems in the commercial banks themselves. Without effective budgeting systems, the commercial banks will scarcely be able to make use of the data that will be flowing from large branches on large commercial advances. In organising their credit schedules, in planning their resource position by way of mo-

TABLE 1: BANK CREDIT TO THE MANUFACTURING INDUSTRY

(Rupees in crores)

	Last Friday December 1972	Last Friday December 1973	Last Friday December 1974
Manufacturing industry	3,193.88	3,826.47	4,703.88
Small-scale industry	659.26	876.35	1,042.21
Large units of the manufacturing industry	2,534.62	2,950.12	3,661.67



TABLE 2: LOCATIONAL DISTRIBUTION OF INDUSTRIAL CREDIT ACCOUNTS, 1974

Location	Number of Accounts of Rs 50 Lakhs and More	Outstanding Credit (Rs in crores)	Per Cent
8 metropolitan and semi-metropolitan cities	1,252	1,718.57	46.9
15 large business centres	104	139.64	3.8
15 locations for the disbursement of advances to large public sector units	25	153.34	4.2
38 locations	1,381	2,011.55	54.9
147 other centres with credit accounts of Rs 50 lakhs and more	204	121.55	3.3
Advances below Rs 50 lakhs	—	1,528.57	58.2
Total		3,661.67	41.8
			100.00

bilisation of deposits and, most importantly, in maintaining optimal credit deposit ratios (so very vital and critical to their profit), the banks will require to match at their end the recommended planning system for large borrowers. Any mis-match in planning, either in terms of timing or quantum, could lead to lack of credibility in the new system and its failure.

The application of budgeting as a management tool was relatively unknown even in the Western banking industry till the early 1960s, though industry and business had adopted it extensively for almost 20 years by then. The prime reason for this difference in approach to macro planning is that budgeting in banks has some very peculiar characteristics. This is because the process in banking is related to estimates of assets and liabilities, i.e., advances and deposits from which the earnings, costs, and profits flow; while in the budgeting cycle of industry and business the reverse is the case.

The existing planning system in all Indian banks except two or three, cannot be viewed as a budgetary control system in the sense we understand it today. Most such planning systems are characterised by a top-down process of allocating targets of performance for deposits and advances of a prescribed 'mix'. The introduction of effective budgeting in banks in India was preceded by an acceptance by the bank's corporate management that such planning was not only useful but necessary to manage its operations effectively and efficiently, and was characterised by a ready willingness to accept the required organisational discipline. The introduction of any budgetary system must also be accompanied by a thorough examination of the current organisational struc-

ture to ensure that budgets are formulated for all responsibility centres — beginning from the lowest to the highest branches — and that they focus upon the market segments of the bank's operations — commercial and institutional/personal/agricultural/small industry and small business/international trade/miscellaneous services, etc. Therefore, the Study Group's recommendations will not generate the benefits visualised unless a concerted effort is made by the banks to match the planning effort of the large borrowers. The effectiveness of any budgeting system will, of course, depend upon the kinds of performance reports which are generated at regular intervals — comparing actual performance with the desired level of performance — and a purposive review and follow-up for remedial action. Most importantly, it will be determined by the top management's commitment to such planning evidenced by their involvement in the administration of the system. McKinsey and Company, was the agency to introduce systemic budgeting and information systems in US banks in the early 1960s. They summarised the position in this matter as follows:

Some banks have already realised a major competitive gain through a commitment to superior planning. Yet, although there is growing awareness in banking that good planning not only pays off but is needed, our study shows that many banks are lagging in their planning efforts. Some banks simply have not tried — as one officer put it, "I don't think it is worth it."<sup>3</sup>

It should be obvious that this process has to be carried a step further; the commercial banks' budgeting systems should be matched by a resource and credit planning system at the macro level, i.e., in RBI. It is heartening to note

that the Study Group's recommendation that a detailed study be made of the RBI's information needs from commercial banks has been promptly implemented. It is to be hoped that the MIS Committee with chairmen of most of the nationalised banks as members, will soon draw up the required system as also establish formal processes for obtaining inputs from major industries. Time, as always, will be of the essence.

#### ECONOMIC VIABILITY

The recommended switch from security-oriented lending to lending based on the economic viability of borrowers will be welcomed by all persons interested in the development of the Indian banking industry. However, the new orientation requires entirely different skills and expertise in appraising credit requirements and review of borrowers' accounts. Does there exist within the banking system today a cadre of credit specialists who will be able to utilise the data collected by the proposed planning and information system for large borrowers? Any meaningful analysis of future projections has to follow a framework (and derived processes) which is very different from traditional exercises like ratio analysis based on historical data and detailed analysis of published annual balance sheets and profit and loss accounts usually available to the banks one year after the event.

The new skills relate to the ability of the credit analysts to first understand (a) the various assumptions underlying such projections, particularly in the areas of marketing (with reference to pricing, volume, distribution assumptions, etc in the context of competition and end-user demand) and production (relating to variable costs of raw materials, supplies, machine and labour productivity, machine balancing, waste, damage, rejections, etc); (b) the optimal levels of managed costs and overheads for various supporting services, (e.g., repairs and maintenance, research and development, legal, accounting, etc); and (c) a host of related managerial and operational considerations. Most importantly, it will be necessary for the credit analyst to develop an insight into the broad organisational strategies reflected in the borrower's product-market posture and his technological and managerial capabilities.

Some credit analysts in major commercial banks are truly outstanding in their ability to analyse historical financial statements. However, do they have the necessary skills for analysing the



business plans of large borrowers for assessing the credit needs of such borrowers? The RBI Study Group did recommend that courses be organised and seminars be conducted to develop the required skill. While some amount of retraining of existing credit personnel will be necessary, long-term responses must include inducting within the banking system people with the required understanding and a total managerial perspective of business which includes but extends beyond the merely financial aspects. Banks will require a selective infusion of entrants with a formal management education background for building up their *credit analysts cadre*. It will be necessary for some of the younger credit analysts to be deputed to management development programmes specially tailored for them — say eight to twelve months long — which will in effect put them through a compressed management education programme. The worlds of commercial banking and management education need to examine, evolve, and jointly mount such programmes without any delay.

It seems to me that the banking industry has not given sustained thought to either the nature and complexity of the problem or the quality, scale, and size of training programmes required to accomplish the change from security-oriented credit analysis to one which examines the operational viability. The number of people who can be retrained quickly or released for the required period for long-term development programmes even in the larger banks will be extremely limited in the coming years. How then are the commercial banks going to cope with the task of credit administration in a very large number of branches?

There was considerable uneasiness among large borrowers about submitting the required information recommended by the Study Group primarily on two grounds:

(1) The analysts in banks will not be able to analyse the data in managerial terms and come to reasonable conclusions on requirements of credit.

(2) The current process of routing all credit requisitions from the branch to the regional office to the zonal office to headquarters or the central office (requiring additional information at successive stages, considerable time for processing the data at each level, and time and effort to convince the bank's

TABLE 3 : CREDIT GRANTED BY SCHEDULED COMMERCIAL BANKS TO VARIOUS SECTORS OF THE MANUFACTURING INDUSTRY (As on the last Friday of December)

(Rs in lakhs)

Sector	1972		1973		1974	
	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent
	3193,88	100.0	3826,47	100.0	4703,88	100.0
Rice, flour, and dal mills	31,87	1.0	53,57	1.4	60,79	1.3
Sugar	74,10	2.3	70,58	1.8	107,83	2.3
Edible oils and vanaspati	69,19	2.2	72,42	1.9	90,51	1.9
Beverage and tobacco	62,14	1.9	75,57	2.0	101,07	2.1
Textiles	694,56	21.7	846,41	22.1	976,70	20.8
Cotton	425,85	13.3	473,60	12.4	574,57	12.2
Jute	104,45	3.3	133,73	3.5	136,17	2.9
Other	164,26	5.2	239,08	6.2	265,96	5.7
Paper and paper products	104,44	3.3	128,52	3.4	146,09	3.1
Leather and leather products	55,46	1.7	52,10	1.4	56,08	1.2
Rubber and rubber products	47,43	1.5	49,71	1.3	78,51	1.7
Chemicals and chemical products	298,75	9.4	381,09	10.0	489,57	10.4
Heavy industrial chemicals	42,55	1.3	57,38	1.5	53,16	1.1
Fertilisers	34,75	1.1	49,05	1.3	91,30	1.9
Drugs and pharmaceuticals	80,83	2.5	96,86	2.5	118,04	2.5
Others	140,62	4.4	183,80	4.8	227,07	4.8
Manufacture of basic minerals	35,08	1.1	55,63	1.5	90,09	1.9
Cement	35,33	1.1	27,31	0.7	35,36	0.8
Basic metal and metal products	401,59	12.6	491,35	12.8	598,78	12.7
Iron and steel	227,26	7.1	264,25	6.9	347,88	7.4
Others	174,33	5.5	227,10	5.9	250,90	5.3
Engineering	633,60	19.8	796,41	20.8	1003,38	21.3
Heavy engineering	435,57	13.6	548,51	14.3	695,35	14.8
Light engineering	198,03	6.2	247,90	6.5	308,03	6.5
Vehicles and transport equipment	169,00	5.3	177,69	4.6	247,64	5.3
All others	481,34	15.1	548,11	14.3	621,48	13.2

functionaries at different levels) will be unduly cumbersome, dilatory, and long, and for these reasons, unacceptable.

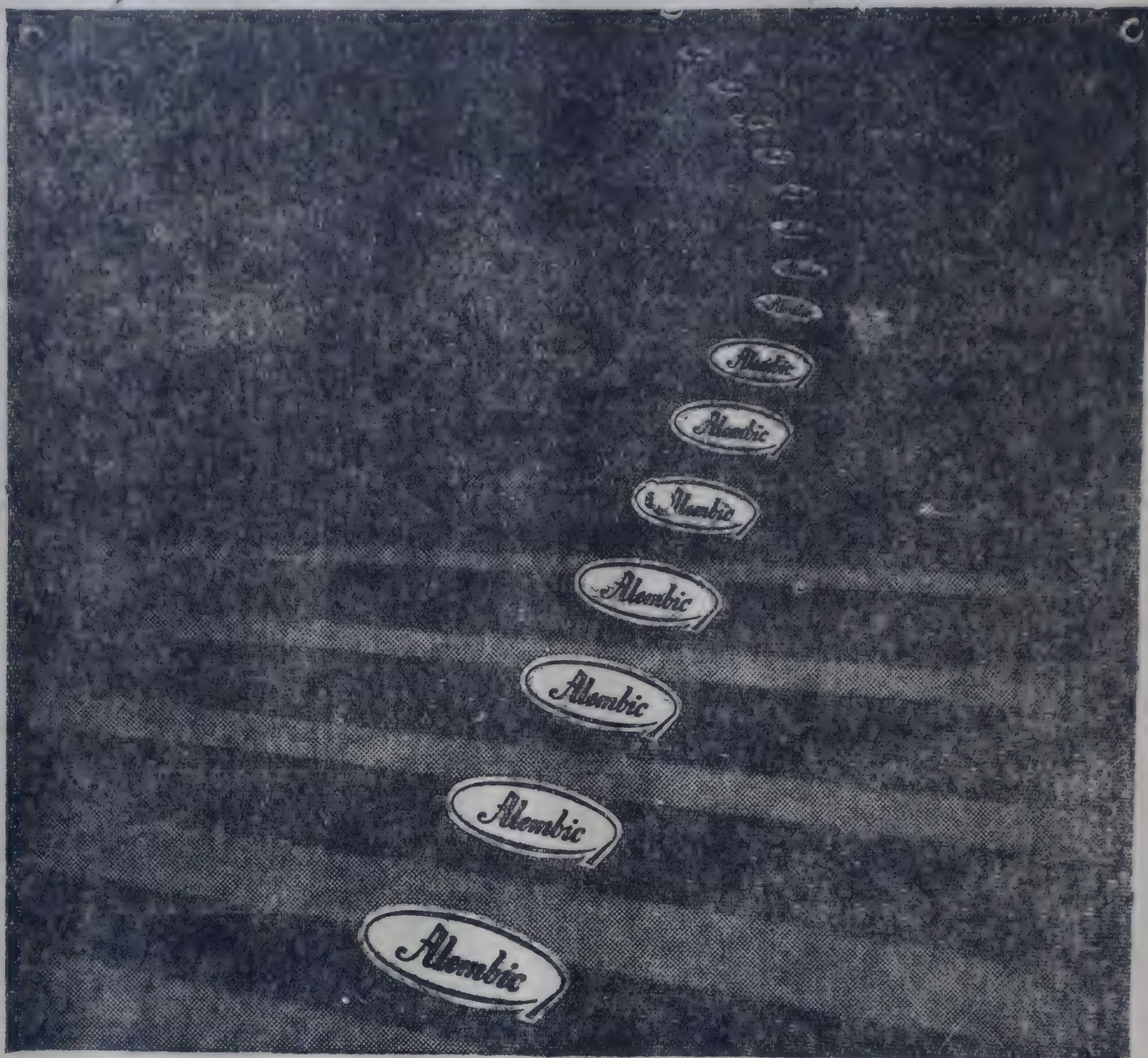
It is not difficult to understand these anxieties and concerns of the larger borrowers — particularly the latter argument. Even though credit applications are 'routed' through branches, regions, and zones (or circles) to the head office, the fact is that, for very large advances of Rs 50 lakhs and more, the real processing of information and the dialogue takes place between the senior manager concerned with the grant of credit at a very large metropolitan branch and the borrower's representative. If the loan is required to be sanctioned by the concerned bank's central board, the final round of discussion mainly takes place between the senior head office manager and the borrower. Repeated professions, that the head office has only a policy-making role, will not erase such situational realities.

At this stage, we might revert to the

basic statistics on the distribution of large loans to units in the manufacturing industry (other than those in the small-scale industry). Since the proposed system is initially to be extended to loans of Rs 1 crore and more (and possibly subsequently to loans of Rs 50 lakhs and more), it is reasonable to hold the view on the basis of the statistics considered earlier that most of these loans will be processed and disbursed by the branches at the eight metropolitan and semi-metropolitan cities.

If we could develop a system whereby the processing of these large loans was essentially centralised in these special metropolitan and semi-metropolitan credit branches, we would be able to make a positive response to the problems outlined earlier. In substance, this means that large commercial banks handling credit accounts of Rs 50 lakhs and more would constitute special branches dealing primarily with commercial credit and, for reasons explained later, foreign exchange transactions





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**TABLE 4: EIGHT METROPOLITAN AND SEMI-METROPOLITAN CITIES HAVING ACCOUNTS WITH CREDIT LIMITS OF RS 50 LAKHS AND MORE**

(As on the last Friday of December 1974)

City	Number of Accounts	Amount Outstanding (Rs in lakhs)
Bombay	507	698,80
Calcutta	372	534,27
Delhi	82	109,99
Madras	121	158,24
Ahmedabad	66	71,73
Bangalore	56	83,57
Hyderabad	29	43,01
Kanpur	19	18,96

(particularly credit granted in relation to exports and imports). Obviously, not each bank needs to open such branches in all these eight cities. Judgments based on economies of scale and cost-benefit analysis have to be made in deciding the location for each bank. These specialised branches, which would have a limited number of customers but very large individual accounts in terms of value, would account for the entire credit operations relating to transactions of Rs 50 lakhs and more. They could be staffed with credit analysts specially trained to analyse projected quarterly business plans and forecast financial statements submitted by large borrowers, thereby ensuring that the basic objective of the Study Group is achieved.

In the initial stages, when the number of credit analysts would be extremely limited, it could be stipulated that all transactions of Rs 50 lakhs and more be centralised in specialised commercial credit branches in metropolitan and semi-metropolitan cities. However, as the banks progressively develop a larger cadre of credit analysts with a managerial orientation, the location of credit processing for large accounts could be extended to the 15 large business centres. (The processing of large credit for public undertakings will have to continue at the metropolitan cities where their head offices are located.)

It is not that commercial bankers in India are unaware of the advisability of effectively utilising specialised skills in credit analysis at central locations. Their argument is that the practice of processing credit applications in large metropolitan branches or head offices runs counter to the current concepts of authority, responsibility, and accountability. They argue:

(1) It is only the branch manager

who has intimate knowledge of the borrower's operations, including market place knowledge of trends in his business and the nature of transactions relating to sales, purchases, collections, cash, etc, as reflected in the operation of the account. Most importantly, the required information is available only at the operational location.

(2) If the credit decision is made at centralised locations, either in very large metropolitan/semi-metropolitan branches or at the head office, they should assume the responsibility for any losses arising out of the stickiness of the account later on, including bad debts. Implicit in this argument is the thought that credit analysis and operation of the account cannot be separated without creating an illogical and unsustainable situation whereby the authority for decision making is at one level and the accountability and responsibility for the result is at another.

While there is much logic in this argument, the fact is that large loans mostly arise in metropolitan and semi-metropolitan cities or, if they emanate from other branches, they are granted in any case after the analysis is conducted in the metropolitan branches or by the head office. Instead of indulging in such make-believe, could we not get out of this stranglehold of pure logic and think of a system whereby the credit analyses of large loans are made by specialised credit branches which also assume, responsibility relating to risks arising from those credit accounts? Of course, the concerned managers of branches from which some large loans may arise have to be charged with the responsibility of providing all the summarised information on the operation of the account in a predetermined format at periodic intervals, say every fortnight.

In practice, many large credit limits, granted by branches located in metropolitan cities to the corporate office of the borrower, are subdivided as credit limits for units at distant places. In such cases, the suggested system already operates, and has been found not very difficult to administer provided the ground rules for supplying information are well established and firmly administered. I am, of course, aware that there will still be some large accounts which will be located at distant places. The earlier analysis shows that the number of such accounts, and their impact in terms of the total quantum of credit, would be minimal. The choice, therefore, would be to have the

credit analysis of such accounts also done in large metropolitan branches with the concerned branch manager acting as the 'agent' of the specialised credit branch in the concerned metropolitan city.

#### ACCOMMODATION FOR INTERNATIONAL OPERATIONS

A related issue centres around the foreign exchange business which is closely connected with the operations of large domestic commercial customers. Apart from the routine exchange and remittance transactions performed for domestic and international customers foreign exchange business in metropolitan branches is essentially a continuum of the domestic operations of large Indian commercial customers and subsidiaries and branches of foreign companies.

A very substantial part of the export-import transactions of most commercial banks comes from the export operations of large domestic commercial customers. It needs to be understood that export transactions cannot be sustained in most cases unless the necessary supporting credit facilities are provided for the domestic operations which provide the basis and infrastructure for the export operations. To meet their export obligations, even those organisations which are primarily export-oriented have to rely primarily on the production effort of domestic organisations. For example, merchant exporters of cotton textile goods have to tie-up with the production and market activities of cotton mills producing textiles for domestic as well as export operations.

Similarly, those foreign companies which wish to avail of the facilities of the foreign exchange division would also expect, and possibly insist, that the credit requirements for their Indian transactions be met by the same banking unit. In addition, it needs to be borne in mind that most foreign exchange transactions, other than routine foreign exchange and remittance service transactions, involve considerable risks for the bank. This is illustrated by the guarantees for deferred payments or term loans provided by the commercial banking system to Indian shipping companies, or term loan facilities or deferred payment guarantees provided to importers in foreign countries (known as buyer's credit). It is necessary to ensure that credit accommodations of the large order involved in such transactions are subjected to the same rigorous analysis considered



necessary for loans of Rs 50 lakhs and more made available to domestic customers.

The question of risk involved in large credit accommodations needs to be explored further. The balance-sheets of Indian commercial banks do not disclose separately the provision for bad and doubtful debts as such disclosures are protected by legal provisions. The statutory provisions protecting disclosures of provisions for bad and doubtful debts by banks in India is based on the belief that such disclosures could lead to morale problems and might not be conducive to creating in the outside world the required degree of sense of stability and security. This is, indeed, a pity because as commercial banks extend their credit facilities to a larger circle of customers — evident in the substantial increase in the supply of commercial credit — it can be presumed that the risk attached to marginal loans would continue to assume greater proportions. To reduce the risk, therefore, appropriate structural and systemic responses are required.

In early January 1976, *Washington Post* reported that two of the largest banks in the United States had been temporarily included in the past in a list kept by the Controller of Currency, the chief US banking regulator of 'problem' banks. The reason for the inclusion of these two banks in the list was that they held relatively large volumes of questionable loans in relation to the capital they had on hand to cushion potential losses. This merited a closer than normal watch over their operations by the concerned agency. In discussing this event, *Time* mentioned that one of the banks concerned would write off a record figure of \$ 310 million as bad debts for 1975, considerably more than double the 116.9 million dollars in gross loan losses in 1974. The other bank wrote off \$ 209.7 million in the first nine months of 1975 as compared with \$ 64.5 million in the corresponding period in 1974. Both these banks subsequently assured the public at large that there was no cause for concern whatsoever and the US Controller of Currency endorsed this view. But the 'ripple effect' continues. A vigorous public debate is being conducted on what checks and balances need to be provided to prevent the occurrence of such events in future.

What is interesting in this context is not so much that these two banks

were temporarily included in the list, but the reasons which led to the inclusion. The chief executive officer of one of these observed: "If we do not want to have losses, theoretically I suppose we could pull out of all marginal situations but I do not think that would be very good for the society." He argued that the main question was not how much the loan losses are but whether the banks are capable of handling the risks, and that the answer to that question had to be 'yes'. We might pursue the issue a little further by exploring what factors enhance the ability of banks to handle credit risks. It should be obvious by now that the recommendation I favour is the development of specialist skills in credit and risk analysis and effective credit administration. This can only be brought about by structures and systems which contribute to the development and sustenance of such specialist skills.

I am led to believe from the various considerations outlined earlier that commercial banks handling credit loans of a large order, say Rs 50 lakhs and more, must channel all activities which relate to such credit transactions, whether they arise out of domestic banking operations or foreign exchange transactions, in special commercial-cum-international banking branches constituted in metropolitan and semi-metropolitan cities. This would not only enable the commercial banks to train their credit analysts in the management skills which I highlighted earlier, but also allow them to utilise this scarce and valuable resource optimally in congruence with the bank's objectives and consistent with the requirements of security.

To get some idea about the requirements of organisation for such large, metropolitan, commercial-cum-international banking branches, we might look at the banking system's experience relating to large metropolitan branches in recent years. It shows that:

(1) The rate of growth of these large branches in the past has been phenomenal. Many of these so-called main branches in metropolitan and semi-metropolitan cities have been doubling their operations every five years.

(2) The expansion in activity has been accompanied by increases in the staff since most Indian banks are unable to resort to non-manual data processing systems for various reasons too well known to be repeated here. It is not unusual for some of these large main

branches to have staff strength ranging from 500 to 2,000 in the same location, depending on the volume of operations of the concerned main branch.

(3) These main branches often act as a super market of banking services (except possibly agricultural banking) as they offer the whole spectrum of banking services beginning from small savings bank account facilities to credit accommodation to a few individual customers which sometimes goes beyond Rs 5 crores.

(4) Most of these main branches also act as clearing agents for the other branches of the bank in the concerned metropolitan area and for out-station branches of the bank in the RBI clearing house, and offer other banking services which are linked to economies of scale and size, e.g. trustee services, buying, selling, storage and servicing of securities, institutional banking involving banking operations of very large institutional customers and public bodies (sometimes involving more than 500 operations in the same account in a day), government business, etc.

(5) The operations of most of the main branches are usually divided into several divisions or departments looking after specific aspects of banking like personnel, commercial, foreign exchange, and institutional banking, securities, and trustee and income-tax services, each involving several hundreds of employees headed by a divisional or departmental manager. Of course, the entire operations of the main branch are headed by a manager of very senior rank who is usually not

TABLE 5: FIFTEEN LARGE BUSINESS CENTRES HAVING ACCOUNTS WITH CREDIT LIMITS OF RS 50 LAKHS AND MORE (As on the last Friday of December 1974)

Centre	Number of Accounts	Amount Outstanding (Rs in lakhs)
Baroda	15	16,41
Poona	19	14,43
Madurai	9	8,54
Coimbatore	9	14,94
Gwalior	9	8,45
Bhopal	5	17,01
Cochin	7	5,36
Visakhapatnam	5	9,60
Guntur	6	11,03
Bhavnagar	7	4,73
Anand	5	6,90
Kotah	5	4,82
Sambhaji	6	4,76
Jamshedpur	6	5,41
Ludhiana	9	7,25



**TABLE 6 : FIFTEEN LOCATIONS FOR THE DISBURSEMENT OF LARGE ADVANCES OF Rs 50 LAKHS AND MORE PRIMARILY TO PUBLIC SECTOR UNDERTAKINGS**  
(As on the last Friday of December 1975)

Centre	Number of Accounts	Amount Outstanding (Rs in lakhs)
Asansol	1	5,20
Durgapur	1	5,38
Bokaro Steel City	3	12,89
Hatia	1	22,93
Dhanbad	2	7,07
Ranchi	1	21,42
Hardwar	1	7,30
Ranipur	1	4,16
Khetri	1	4,25
Ramchandrapuram	1	18,17
Rajahmundry	3	4,37
Jalahali	3	11,58
Doorvaninagar	1	14,21
Neyveli	2	7,25
Tiruchirappalli	3	7,16

able to look after the very important and critical commercial-cum-international banking operations because his time is spent in dealing with frequent, unforeseen emergencies. This has led to the appointment of another senior manager heading that division within the main branch. Duality of responsibility within the same main branch is, therefore, not unusual.

(6) The very substantial growth in manpower has resulted in a severe shortage of space. The layout and the workflow of many of the divisions have considerably suffered due to erratic and irregular spreading out in different locations resulting from a contingency approach to operational planning. Such a sub-optimal layout and workflow has tended to increase the time required for the completion of most activities and has resulted in a somewhat lower than desired level of productivity.

(7) The sheer diversity of business, the scale of operation, and the large number of employees in one location, have resulted in managerial time being spent on 'fire-fighting', mostly for personnel and logistics problems instead of on planning and development of activities and generation of specialist skills in credit analysis, foreign exchange business, etc.

In short, it can reasonably be concluded that with the projected growth in banking activities in the coming years, the metropolitan branches will soon have a level of productivity which will be unacceptable either in terms of cost-benefit or in terms of meeting the desired level of customer service.

One activity which is likely to suffer

very substantially in the coming years, if the current trends in the operations of the metropolitan main branches continue, is the commercial credit activity conducted in these branches which account for more than 80 per cent of the industrial advances of Rs 50 lakhs and more. It is thus necessary to think urgently of reorganising these main branches to increase productivity and efficiency, and the level of customer service.

Therefore, these commercial-cum-international banking divisions of the main branches in metropolitan cities have to be spun-off as separate branches in metropolitan cities for providing them with a distinct identity which will contribute to the achievement of the required level of productivity and efficiency. A location separate from the main branch would not only contribute to the establishment of an individual identity and development of specialist skills, but also provide for the institution of some effective systems and procedures and an optimal layout leading to more rational workflows.

It might be argued that the cost of space in most metropolitan cities is so exorbitant that this would be a very expensive proposition. I wonder whether the managements of banks ever look at the opportunity cost of not providing the required space and facilities to these commercial-cum-international banking operations. In my estimate, the opportunity potential of each square foot occupied would be many times its cost, given the fact that such commercial-cum-international banking branches will generate surpluses which will most probably constitute in their totality, in the case of many banks, almost three-fourths of the bank's total surpluses. I submit that a little arithmetic would clear up a great deal of such vague generalised thinking.

I also suggest that these specialised commercial-cum-international banking branches be headed by managers of very senior rank, possibly at the general manager's level in selected cases, to reflect the bank's acceptance of the criticality of these operations. This recommendation might be questioned on the basis that it would create problems of interaction between these managers and general managers charged with the total responsibility of the operation of the zones or regions in which the concerned commercial-cum-international banking branch is situated.

It appears to me that as these

commercial-cum-international banking branches would handle credit transactions of a large order, involving decision making which has critical dimensions in terms of both the bank's resource allocation and its risk acceptance, it is appropriate to think of their general manager as part of the zonal management. This will be relatively easy to implement as the zonal or regional offices are located in metropolitan cities and it should be possible for the general managers of the commercial-cum-international banking branches to regularly interact with and participate in the management meetings of the concerned zonal or regional managements. This will enable them to have a continuing understanding of the bank's policy which they can reflect in their own decisions on granting credit and conducting international banking operations. This structural mechanism, or the 'boundary role', will also provide the relevant inputs to the zonal or regional managements, particularly on commercial credit and international transactions, so as to enable them to evolve policies consistent with market place requirements.

The above recommendations will ensure a structural linkage in policy reflected in the fact that it would enable general managers of the commercial-cum-international banking branches to take decisions on their own, thereby freeing the zonal managements for planning and monitoring developmental activities, particularly those relating to other market segments, which would appropriately lie with them. On the question of the dilution of the role of general manager (operations) in the zonal or regional office, it needs to be accepted that, in reality, even today, he has no major role in credit operations as they are dealt with directly by the manager of the commercial banking division in the main branch in consultation with the chief executive of the zonal office, by-passing him, primarily on account of the need for quick processing. In other words, the proposed set-up merely rationalises and makes explicit what is already done in most situations as a necessary deviation from the 'official' structure.

I suggest that the general manager of the commercial-cum-international banking branch be supported by three managers — one each for commercial banking, international banking, and foreign exchange services. He should have, in addition, appropriate secreta-



riat support to enable him to plan and monitor the work of the branch without taking on an additional operational role which will vitiate the basic objective. This secretariat should be staffed by two middle-level managers who have an adequate understanding of the work done in credit groups (whose functions are spelled out below) and in the international banking division.

Commercial banking activities should be divided into groups of accounts of optimal size depending upon the number of credit accounts handled. There is very good reason to believe, on the basis of a preliminary study, that the number of large credit accounts in each group should not exceed 50 to 60. It would be particularly desirable to distribute the very large 'national' accounts among the groups to ensure not only a balance of work load but also varied experience derived from administering accounts belonging to different business and industries. It will also be appropriate to allocate to individual credit groups the accounts relating to major industries, e.g., textile, engineering, chemicals, sugar, etc. An 'industry' specialist could then be attached to the concerned credit group for providing technical support and for developing a data bank for the concerned industry.

Group managers (credit) should be viewed as managers of responsibility centres, providing the entire package of customer services at one managerial location. This would not only include the processing of credit facilities (cash-credit, demand loans, term loans, overdrafts, remittances, bill purchases and discounting limits, letters of credit limits and guarantees, etc), but also encompass the operation of term loan ledgers, cash-credit ledger operations, insurance arrangements, inspection and follow-up, and group personnel administration. One of the most important recommendations in this context is the constitution of service groups which will render to the customers of each of these groups the entire package of services, i.e., remittances outward, collections, purchases of cheques and bills, negotiation of usance bills, payment orders, observance of standing instructions, etc. Finally, the group manager must have under him the minimal support required for staff administration.

The manager (commercial banking) should also have under him a deputy manager (inspection), a group manager (deposits) for those accounts involving deposits in current accounts, term deposits, and overdrafts, and a deputy manager (accounts) to make the commercial credit operations truly self-contained. The manager (international banking) should be supported

by a deputy manager to look after activities of export houses and exporters/shipping and other public companies, international corporations, etc. He should have a deputy manager (development) who would ensure that the required analysis for medium- and long-term export credits is conducted with adequate rigour and all the required developmental activities for export promotion and new services for existing customers take place. The manager (international banking) should also be supported by a deputy manager (accounts).

The manager (foreign exchange services) should look after the routine foreign exchange and remittance transactions relating to rates and contracts, collections, purchases, negotiations arising out of exports and imports, establishment of letters of credit and execution of guarantees, cables and remittances, and non-resident accounts. His division would release the commercial and international banking division from routine foreign exchange work, allowing them to develop their specialist skill and pursue their developmental objectives. I need hardly point out that the usual supportive services like personnel, legal, and accounts need to be provided.

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One of the basic recommendations I would like to make is that the existing operations for commercial and international banking be made as self-contained as possible. Currently, in many main branches, activities relating to customer services (remittances, collections, purchases, etc), have become so segregated that they require the performance of a unique function at each work stage. As a result, the full productivity potential of the employees is not reflected in the total operations; each employee performs a specialised activity and, until such time as the prior processes have been completed, he does not perform at a high level of productivity. Further, since these activities are carried out at different locations outside the division's own operations, e.g., in the accounts department of the main branch, the result is the non-identification of the employees carrying out such banking services activity with customers as the former have no opportunity to interact with the latter. The practice of having too many specialised work stages, which dilutes creativity, as also locating banking services at different places needs to be substantially altered by the introduction of service groups attached to divisions and credit groups. Under this design, certain personnel will be identified as members of a common work group with responsibility for performing the total sequence of operations relating to certain specified banking services required by a group of customers. This will lead to the provision of greater variety and challenge in work for the employees in these service groups. Such a challenge would motivate them to improved productivity matching their true performance potential. This will, of course, involve greater delegation of authority, relaxation of current rules and procedures relating to accomplishment of work, and development of new accounting procedures.

The concept of service groups was first enunciated by Pehr Gyllenhamner, President of Volvo, in the following terms:

We will try to create jobs which, without detracting from quality or efficiency offer modern man more incentives and satisfaction in his daily work than before.... The employee wants to feel that he belongs to a group, that he can communicate freely, that he can identify himself with the product, and that he is given full appreciation for the work he carried out.

This concept has now been applied in several industries including banks abroad. Some banks have devised new work procedures under which clerks are assigned all the duties of completely processing corporate accounts from credit payments to returning unsigned cheques.

The concept of service groups assumes that an employee working in these groups will perform a variety of jobs, e.g., remittances, collections, and purchases. This will create a psychological change in the employee, giving him a better understanding of the work and an increased feeling of team work. The duties of the employees in the service groups will be larger compared with the tasks they performed in the previous set-up, i.e., routine and repetitive tasks for many years in the central accounts department. The new concept will make the work more interesting for the employees as they will see for themselves the output of their efforts, particularly the satisfaction of customer needs. At the organisational level, the concept of service groups will lead to the utilisation of the true potential of each employee in the service group and the achievement of higher productivity while creating simultaneously a greater sense of achievement among the concerned employees. Most importantly, it will enable the customer to have all his demands for banking services handled at one focal point. The achievement of customer satisfaction will, therefore, be greatly enhanced.

There will inevitably be some initial problems relating to the role and status of the leader of the group, evaluation and reward system, authority and responsibility for dealing with emergencies, determination of the staff complement, etc. However, the banking industry is fully capable of resolving these problems, provided experiences from 'pilot models' are recycled for developing the required guidelines prior to the introduction of the service group concept in the entire operations.

Finally, to enable the proposed commercial-cum-international banking branches in metropolitan cities to perform at an optimal level, it has to be ensured that routine activities involving repetitive actions as also agency work on behalf of other branches in the metropolitan cities as well as out-station branches are separately organised. I recommend that separate service branches be organised at locations different from those of commercial-cum-international banking branches for handling agency

functions relating to clearing work. This will ensure that the commercial-cum-international banking branches will handle only cheques and instruments pertaining to their own accounts and will be released from the agency function of clearing work relating to other branches. Incidentally, the creation of a service branch, handling inward and outward clearing for *all branches* in the metropolitan area and the out-station branches, is a new concept which needs to be considered by large scheduled commercial banks if they are to release the operating divisions of main branches in metropolitan cities from the routine work of clearing. This will also lead to benefits from the optimal utilisation of specialist skills on account of economies of scale arising from processing a large volume of work at one centralised location.

#### CONCLUSION

In conclusion, I repeat that the recommendations of the RBI Study Group for improving the manner and mode of commercial credit operations in India will not be substantially achieved unless new credit analysis skills, which are essentially managerial, replace the present financial analysis skills. This change demands considerable retraining and utilisation of skills on a purposive and pragmatic basis. Given the spread and distribution of large loans as also the connotations of resource utilisation and risk, these skills are best utilised by constituting large commercial-cum-international banking branches in metropolitan and semi-metropolitan cities by weaning them from current main branch operations. The creation of service groups to provide customer services at one focal point and the opening of special service branches for handling clearing work for other branches, would substantially improve the effectiveness of the proposed credit administration process and structure.

#### Notes

- 1 The author is deeply indebted to R K Hazari, A Raman, and C S Ramchandran, for making available the latest banking statistics on industrial advances. The views and suggestions are, however, entirely my own.
- 2 These are estimates mentioned in the financial press and not firm data published by RBI. They are, therefore, used only as indicators.
- 3 Chapter 2 of "Developing Future Bank Management: A Study" by McKinsey and Company, prepared for the Trustees of the Banking Research Fund Association of Reserve City Bankers.



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# Foreign and Indian Merchant Capital

## Its Impact on Pre-Colonial Bengal

Amalendu Guha

**Trade and Commercial Organisation in Bengal 1650-1720 with Special Reference to the English East India Company** by Susil Chaudhuri: Firma K L Mukhopadhyay, Calcutta, 1975; pp XII + 293 including appendices, two maps, diagrams and illustrations; Rs 40.

SUBA-I-BANGALA — a Mughal province constituted of Bengal (East and West), Bihar and Orissa of today — saw a long period of relative peace and order and expanding economic activities during the period 1650-1720. The throttling supremacy of the Portuguese over the Bengal waters had virtually collapsed in the 1630s, and their last stronghold, Chittagong, was annexed to the Mughal empire in 1666.

Unlike their Dutch counterpart, the English Company did not send their sea-going ships up the Ganges to Hugli, Bengal's chief port, till the 1670s. The port used to serve them only as an entrepot till then. Goods therefrom used to be finally despatched in sloops to Balasore — an English factory was there since 1633 — where the sea-bound vessels were laden. Later the English, too, began to load and unload at Hugli, where their factory had been established as early as 1651. The elimination of the Portuguese supremacy in the sea, the competitive co-existence of the Dutch and English Companies replacing it and the coming of the French — these made the situation more congenial than before for participation of Indians in the coastal and oceanic trade.

Consequent upon this development, a network of European factories — operating from important trade centres like Balasore, Hugli, Kasimbazar, Patna, Dacca, Chinsura, Baranagar, Malda, Chandernagor and Sutanuti — extended their trade all over the region. By the end of the seventeenth century, the process culminated in the emergence of a couple of new factory townships — self-governed and fortified European merchant settlements — ready for armed intervention whenever needed. These were nevertheless tolerated by the Great Mughal. For the imperial exchequer and the local governor benefited from their trade.

In the first half of the seventeenth century, the European Companies' demand for textiles and other goods had been oriented to bartering these for pepper and spices of Southeast Asia for Europe. During the period under review, however, it was by and large oriented directly to European demand. In Bengal's expanding external trade, Europe was not yet the chief trading partner — the rest of India and Asia playing hardly a less important role. Exports far outstripping commodity imports from Europe, there was a steady inflow of precious metals into Bengal from year to year. This in turn led to an expansion of currency in circulation and tended even to cause a price revolution. A concomitant development of this was presumably the substitution of a money tax for tax-in-kind on an increasing scale. This forced peasants to market a part of their production to enable them to pay the land tax. Shroffs, bankers and merchants prospered. All these arguments are implicitly, if not explicitly, involved in the thesis that Bengal's economy was increasingly commercialised during the years 1650-1720.

This book under review is a focus on what exactly happened in the region's trade and commercial organisation during the period. The English and Dutch Companies, between them, exported goods annually worth about half a million rupees, on an average, during the first two decades of the eighteenth century — not an inconsiderable magnitude in the context of Bengal's then revenue collection of Rs 1.3 million a year. These Companies apart, European interlopers, Armenians, Indians and other Asians, too, accounted for a considerable volume of the export trade — overseas, overland and coastal. The combined effect of all their activities — buying and selling of commodities, mobilisation and distribution of short-term credit, remittance of funds, money-changing,

discounting of bills and transportation of goods — had no small impact on Bengal's economy as a whole.

Demand of the European market was limited to such commodities as saltpetre, sugar, raw-silk and varieties of textile piece-goods, the latter overshadowing all other items. Bengal's export goods entering into inter-provincial and inter-Asian trade also included considerable quantities of rice and other foodstuff besides the aforementioned trade items. Towards the close of the seventeenth, and in the first two decades of the eighteenth century, the English Company's Bengal trade far surpassed its Surat or Madras trade, both in volume and value. In the absence of demand for European goods in Bengal, 90 to 95 per cent of the value of the Company's return cargo used to consist of precious metals. Imports into Bengal through inter-provincial and inter-Asian trade included raw cotton, cotton yarn, tobacco, copper, cowries, elephants, tin and other sundry items.

Muslin and quality silk — both high-cost luxury goods — had a widespread, well-organised inter-regional and overseas market. Localised respectively at Dacca and Kasimbazar and having the advantages of cheap water carriage and proximity to raw materials, these handicrafts involved a high degree of specialisation at the production and distribution levels. Craftsmen were, however, not necessarily urbanised; they continued to cluster largely in the rural areas, within the easy reach of the *aurangs*. Foreign merchant capital utilised the service of merchant-middlemen to procure their goods, in most cases. In the case of Dacca textiles, e.g., *dadni* or cash advances were given to the *dalals* or brokers who in turn advanced the same to the *pikars* or petty agents. It was the *pikars* who then visited the production centres — Kagmari, Dhamrai, Sonargaon, Junglebari, Santosh, Bajitpur, etc — to distribute the advances amongst the craftsmen. With some local variations, the same pattern was there also elsewhere. Susil Chaudhuri's assertion that "both cash advances and the giving out of raw materials were established practices" (p 231) and that "something like putting-out system has already developed at least in some isolated pockets" (p 154), needs



documentation which is absent in his text. Even in the absence or extreme paucity of advances in the form of raw materials, merchant capital no doubt did exercise some control — however feeble that might be — over the size and quality of the goods ordered for. But this alone does not subjugate the production process to merchant capital. Hence, Chaudhuri concedes that “as yet there was no full-fledged putting-out system involving deep penetration of capital into production” and that merchant capital “was only interested in the finished products and thus remained largely outside the production organisation” (p 234). To validate even this guarded observation, one wishes the author had given evidence, if any, to show that *dadni* was given also in the form of raw materials (in some cases at least).

Techniques in the organisation of trade and industries, adopted by foreign merchant capital, also “conformed in all essentials” to the prevailing traditional methods. Despite insistence on size and quality-specific samples, Bengal’s handicraft production remained insufficient to whatever potentiality of standardisation there was. For Europe’s taste in this respect conflicted with that of the Indian and Asian markets, so far dominating the textile exports. Even the new manufacturing — for bleaching, dyeing, as also for winding or reeling silk — that appeared on the scene were modelled on the traditional royal and private *karkhanas*. Occasional importation of a few technical personnel from Europe to promote new skill-formation amongst local artisans had also little impact upon them, because of the marginality of such ventures. Nor were the English Company’s attempts to organise their dependent businessmen into joint-stock companies successful. Not even to the limited extent of the Jan Company’s success in the Coromandel, in this respect.

European East India Companies, interlopers, Indian, Armenian and Central Asian traders — all had to enter into competition in a sellers’ market. In the circumstances, it is somewhat puzzling that no significant changes were brought into the pattern of commercial organisation.

Amongst the constraints responsible for this lag, the author highlights three: (i) the unfavourable institutional framework, (ii) the multi-form bureau-

cratic exploitation and interference and (iii) the continuous drain of Bengal’s wealth to upper India in the form of a tribute to Delhi and by Mughal officers and expatriate merchants. It is suggested by the author that because of the persistent leakage of a considerable part of the imported precious metals into this drain in minted form and another sizeable part into hoarding, the degree of monetisation achieved remained limited. And to that extent, a price revolution of the European variety was aborted in Bengal. Chaudhuri rejects the findings of J N Sarkar and Moreland on the behaviour of prices in 17th century Bengal.

The author further argues that, despite keen competition in the market for craft goods, “the power of the merchant middleman was such that he was apparently able to dictate prices both to the company and the weavers” (p 238). This resulted in the abysmal poverty of the artisans, the lowering of their status to a dependent one and a lack of innovating zeal on their part. Whether working to order or producing independently for the market, the producers remained poor and unenterprising. In other words, commercial prosperity did not percolate down to the grass-roots.

The historian will be particularly interested in the detailed information the author gives on Bengal merchants and commercial organisation in Chapter Four of the book. Bengal merchants (of Indian domicile) — even those acting as brokers or middlemen for the Companies — maintained their credit and influence quite independently of the European Companies. Khemchand Shah (d 1687) and Chintaman Shah (d 1697) of Balasore, Mathuradas (d 1706) and his son Vallavdas of Hugli, Sukananda Shah (d 1680) of Kasimbazar, Janardan Seth (d 1712) and Benarasi Seth of Sutanuti (Calcutta) and others, including many Gujarati Muslims not identified by the author, were opulent merchants, engaged in inland and/or coastal and overseas trade. These merchants had generally multiple functions — as buyers and sellers of different commodities, as shroffs and bankers and also as brokers for others. Operating with their own capital, they carried on commercial ventures mainly at their own individual risks. This was true even when they accepted deposits or traded with capital supplied by the nobility. The idea of risk-taking on a joint (and

long-term) basis was foreign to them. Thus, Indian merchant capital failed to take a generalised form in Bengal, as much as elsewhere in India. Similarly, despite a remarkable growth in the credit system, interest rates remained unusually high on any standard. Merchant capital — Indian or foreign — was not directly involved in the production process; hence there was no demand for or supply of long-term credit for investments. Merchant capital continued to develop “on the basis of a mode of production, independent and outside of it”<sup>1</sup> and therefore it was not opposed to this prevailing mode.

Most of the prominent Bengal merchants were not, however, Bengalis; they were Gujaratis and Marwaris. For example, of the 18 prominent

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merchants supplying raw silk and piece-goods to the Dutch at Kasimbazar as many as 9 were Gujaratis (p 98, date not given). Apparently, the Marwari bankers and traders had no maritime trading activities, and, during the period under review, they played a lesser role in Bengal's trade than their Gujarati Hindu and Muslim counterparts. One could perhaps also include the opulent Armenian traders in the category of Bengal merchants, because of their Indian domicile. Neither an adequate coverage of the Armenian group nor of the internal trade has been attempted in the book.

In the pyramidal structure of Bengal's pre-colonial external trade organisation, three distinct structural elements clearly stand out —

- (i) the foreign merchants at the apex;
- (ii) the big Bengal merchants — Indians mostly of non-indigenous origin — procuring goods for the first group and also trading and banking independently; and
- (iii) the *pikars* or dependent petty merchants at the bottom of the pyramid.

Of these three, the *pikars* were obviously the most numerous group. But we know so little about them. Unlike the traders of the first two groups they were mostly sons of the soil (Bengalis, Biharis, Oriyas) who had a role subservient to big merchant capital. Some of them must have risen from the ranks of the craftsmen. Some were upper-caste *bhadraloks*. Many more perhaps came from poorer sections of the artisan-cum-trading castes — traditionally engaged in internal (inter-district and intra-district) trade in yarn, grain, oil and oilseeds, sugar and gur, betel nuts and leaves, salt, liquor, etc. Was there any impact of the commercialisation process under review on the structure of Bengal's artisan and trading castes, in terms of their fission or fusion, towards their further specialisation? Do the contemporary sources throw any light on the social and occupational mobility of such castes as Sunries (liquor-brewers) and Sahas, Telis (oil-pressers) and Tilis (oil traders), Basaks (yarn and cloth dealers) and Tantis (weavers)? One wishes, Chaudhuri dealt with such questions, even if these were difficult to answer.<sup>2</sup> Limitations, if any, of his source materials in this respect could have perhaps been circumvented had he more

liberally drawn upon relevant research by others and diverse secondary sources.

The study remains somewhat deficient also in the matter of identifying the Marwari and Gujarati-Muslim merchant-bankers and their relative importance — the former's linked with over-land trade and rising, and the latter's linked also with maritime trade and declining — in the Bengal context. In this respect, too, secondary sources like N K Sinha's volumes on Bengal's economic history, available writings on the Marwari houses and even some quasi-historical works on castes could have been intelligently used to bridge up gaps in the source materials and gain thereby new insight.

Whether there was all-round economic growth in Bengal in the circumstances is and will remain a difficult question to answer. However one can say in no uncertain terms that Britain's Bengal connection helped lift the former from its commercial infancy to a stage of commercial maturity thus enabling it to become the world's warehouse in the period under review. Precisely because of this, the new concept of foreign trade as a promoter of diversified national economic growth was increasingly accepted by mercantilist Britain. The Court of Directors wrote to Bengal in 1703:

"We esteem it Duty incumbent upon us, to England and our posterity to propagate the future interest of our nation in India which can hardly be done but by encouraging the trade thereof from port to port..." (cited, p 215).

The Company did not fail in its duty. Seeds sown by it germinated in due course, thus fructifying Britain's economy and developing the underdevelopment of Bengal.

The book under review is no doubt analytically rich and is a welcome addition to our knowledge of 17th-18th century Bengal, based as it is mainly on primary sources with a special reference to the English East India Company. One however feels, additional information, gleaned from published research should have been dovetailed into the book, with a view to enhance its usefulness. A more comprehensive view of pre-colonial Bengal's trade and commercial organisation could have been presented thereby, since his sources are not, by themselves, adequate, for the purpose.

However, even without such ramifications, the study has competently

confirmed the view that potentialities of structural change in the Mughal-Indian economy, if any, were bleak during the years 1650-1720.

### Notes

- 1 Quoted from Irfan Habib, "Banking in Mughal India" (1960).
- 2 Gautam Bhadra, Centre for Studies in Social Sciences, Calcutta, has shown in an in-depth study, yet unpublished, that the *pikars* in the silk trade hailed from all strata of the local society, and quite a large number of village headmen and substantial peasants featured amongst them. They exercised effective control over the producers of raw silk. Many were rich, and some of them even owned private filatures involving employment of wage-labour. All this, however, refers to the full-fledged colonial situation of a subsequent period, 1757-1833. Chaudhuri's study has not indicated the direction in which the *pikar* system of his period was moving.

### Indmark

INDMARK, edited and published by H N S Myer from Bangalore, is a useful compilation of a variety of economic and commercial data. It succeeds in highlighting the varied nature of industrial and consumer products available in India, and the fair degree of sophistication that Indian industry has attained. The organisation and the arrangement of the material has been done in an intelligent manner, and the compilation is a notable exercise in compression. While much of the material is of the kind that one would find in any similar compilation — like the World Almanack — Indmark is noteworthy in that it puts together all the useful facts about India's commercial enterprises. Businessmen will thus find the compilation — especially the trade section where 3,700 'products' are listed in 'international format', from Abrasive Bonded Products to Zoological Collections — quiet useful.

For the browser too, there is a lot in the volume. Of course, for generations of browsers, the classic in the field has been the one-volume Pears Encyclopaedia; and while it would be too much to hope that Indmark will replace Pears, it is nonetheless gratifying that an attempt has been made by the enterprising editor to encompass, in a single, handy volume, such a lot of interesting, varied and useful facts.

"INDMARK", edited and published by H N S Myer from 16 Queens Road, Bangalore 560 001, is priced Rs 75.



# Ceremony and Social Structure in 19th Century Punjab

Leighton Hazlehurst

*In this paper the author examines some aspects of social structure and ceremony in 19th Century Punjab, with the hope that we may be able to see more clearly how the concerns of caste society differ from the "spirit of capitalism" as it developed in the class societies of the West.*

*The sources for this study are derived from a limited number of historical documents and from anthropological field research in the town of Jagadhri, located some 125 miles northwest of Delhi.*

*The 19th Century is significant for it marks the transformation of the society from one based on the ceremony of the chiefs and rulers to the social dominance of the merchants and agriculturists.*

*This period also reflects, it seems, a change from society as seen as a narrative about the past, in which the ceremonial bonds between communities were stressed, to the descriptive accounts of more contemporary persons and events in which the social structural characteristics of the merchants and agriculturists began to gain an increasing importance.*

## I

### Introduction

AS is generally well known, Max Weber insisted on the pre-eminence of a particular ethic or "spirit" in advancing his thesis on the development of modern capitalism in the West. This ethic, which was fused with the historical and sociological processes of the Occident provided the intellectual and emotional justification for the particular social order which emerged in Western society. Weber was, of course, aware that capitalism existed in other parts of the world, such as in India and China, but noted that it lacked there the particular ethical norms which characterised the capitalist spirit of the West. Such a spirit was crucial, for it shaped the value of work (and hence economic activity) in the form of a calling, or special command of God to fulfil a particular course and station in life imposed upon one by divine will. It was, then, not simply a desire for riches as such, but a particular world view which shaped economic activities in the West and differentiated them from the economic life of countries such as India.

This ethic had important social correlates and played a major part in accounting for the particular shape and details of the social organisation of class society. Weber wrote, "The differentiation of men into the classes and occupations established through historical development became... a direct result of the divine will. The perseverance of the individual in the place and within the limits which God had assigned to him was a religious duty" (1958; 160). This ethical justifi-

cation for the division of labour and existing social stratification was, then, at the heart of the "spirit of capitalism". It gave to the bourgeois businessman, in Weber's words, "the comforting assurance that the unequal distribution of the goods of this world was a special dispensation of Divine Providence, which in these differences, as in particular grace, pursued secret ends unknown to men" (*ibid*; 177).

Such an ethical conception helped in the formulation of an explanation of why, given a general ideology of the equality of all men, society was divided into social classes and diverse occupations; of why some were successful in this life while others were not. Success did not result from the arbitrary and irrational outcome of chance. The different classes and occupational groups were the reflection of the workings of a divine will, and while the "spirit" of capitalism was accessible to all, some were, due to God's grace, more successful than others. "With the consciousness of standing in the fullness of God's grace and being visibly blessed by Him", wrote Weber, "the bourgeois businessman, as long as he remained within the bounds of formal correctness, as long as his moral conduct was spotless and the use to which he put his wealth was not objectionable, could follow his pecuniary interests as he would and feel that he was fulfilling a duty in doing so" (*ibid*; 176-77).

Why was the "spirit of capitalism" lacking in a country such as India? Weber's answer rests in distinguishing between the religious systems of Protestantism and Hinduism. According to Weber, Hinduism (as well as other

Asiatic religions) places emphasis on the other worldly values of mysticism and magic, of the rationally unformed and inadequately communicated knowledge of a special ritual class. In doing so, Hinduism sacrificed the rational, inner worldly asceticism characteristic of Protestantism in the West (Weber; 1958b; 337). One can argue, however, that in formulating the differences between Protestantism and Hinduism in terms of contrasting values and beliefs, Weber lost sight of important differences between issues central to the functioning of a class society and those central to caste. In the case of class society, Weber recognised that the overwhelming religious problem stems from the fact that given the belief in the fundamentally equal nature of all men, one must somehow account for the differences in the distribution of wealth and privileges that exist among them. In the case of the caste system, however, the central problem appears to be, "given the inherent differences in traditions and beliefs among men as reflected in the system of castes, how is it that men of such fundamentally different interests and capabilities can live within a single society at all"? While the class problem could be resolved in terms of a diffuse "ethic" or "spirit" which penetrates and binds together the diverse parts (social classes and occupational groups) the problem of caste must be seen in terms of a complicated body of ritual, ceremonial and structural relationships which, though absent from the Protestant formulation of the class problem, remained central to the Hindu conception of caste. From the perspective of caste, Hinduism was never



much of an ethical system at all, but rather a social system which sought to bind together communities with diverse historical traditions and norms. This problem was not resolved then in terms of a common spirit or preoccupation with values accessible to all. In this sense, otherworldly values of mysticism and the rationally uniformed were not what was central to the Hindu problem of articulating the different social groups (castes), each with its own customs and traditions.

To resolve such differences Hinduism evolved at least three mechanisms for drawing together in a single society the diverse parts of which it is composed. The first of these was a ritual bond exercised by the priests, or Brahmins. The second was a ceremonial bond between communities based on the physical or moral authority which the ruler (generally Kshatriyas) exercised over his subjects. The third was a structural bond characteristic of the merchants and agriculturists (Vaishya) who owed their position in society to their attachment to the material things of this world — to family, productivity, agriculture, trade and cattle. These differentiated functions and the distinction between the ritual and ceremonial position of the priests and rulers on the one hand and the more worldly social position of the merchants and agriculturists on the other is easily obscured when caste is considered as a single structural or ethical system in which different castes merely share more or less of the same qualities (e.g., more or less ritual purity or pollution, political or economic power, otherworldliness, etc).

In this paper I would like to examine some aspects of social structure and ceremony in 19th Century Punjab, with the hope that we may be able to see more clearly how the concerns of caste society differ from the "spirit of capitalism" as it developed in the class societies of the West. The sources for this study are derived from a limited number of historical documents and from anthropological field research in the town of Jagadhri, located some 125 miles northwest of Delhi. The 19th Century is significant for it marks the transformation of the society from one based on the ceremony of the chiefs and rulers to the social dominance of the merchants and agriculturists. This period also reflects, it seems, a change from society as seen as a narrative about the past, in which the ceremonial bonds between communities were stressed, to

the descriptive accounts of more contemporary persons and events in which the social structural characteristics of the merchants and agriculturists began to gain an increasing importance.

## II

### Ceremony and Political Order

Jagadhri is situated along an ancient trade and pilgrimage route leading from western India into the Gangetic plains. The prehistoric origins of the region, seemingly like all regions of India, is associated with the religious symbols of Hinduism; with shrines, temples and sacred waters. The basis for ordering the complexity of religious symbols in the area is a ritual one, which rests in the hands of temple priests and attendants. It is not my purpose to examine this ritual order, but only to note its importance in providing the setting for political and economic activities. The religious landscape of Hinduism precedes the establishment of political order or material prosperity and while it is conceivable that inhabitants of the area would disagree about the location and interpretation of religious sites, it is inconceivable that political and economic life would be carried on in an area in which they did not exist at all.

The political history of the region takes the form of a narrative about the past which begins with Rajput rule. According to this narrative, the area was part of an ancient Rajput kingdom of considerable size and administered in accordance with a moral quality which bound together, without question, the ruler and the ruled. During this period, the kingdom is portrayed in tranquil terms and justice and prosperity prevail on all sides. It is, it seems, a period "too good to be true". While such a narrative in no way serves as a model or reflection of recent political experience, it does provide the conditions in relationship to which that experience may be measured. Such narratives about the past fall, in Epic fashion, within the province of the bard and story teller and one cannot learn much about this period from available historical documents. Nevertheless, the importance of this narrative image, that draws out persons and events in larger than life manner, should not be overlooked simply on the basis that it fails to correspond to reality, for it continues to occupy a

significant point of origin for the discussion of political order within the region.

Turning to the historical documents themselves brings us rapidly to the 19th century and the obverse side of the tranquil story told by the bards. The documented history of the area is associated with the activities of the numerous Sikh chiefs who had, during the 18th century, gained control over the region between the Sutlej and Jamuna rivers. Territories were gained by military conquest and divided into small estates. The historical record contains little to suggest that the basis of the political groupings was the same as that of the harmonious moral order and heroic deeds of ancient rulers. Rather, the written historical record is episodic, stressing the strife and turmoil and conflicting, self-serving actions of petty chiefs. Cunningham's description seems typical of this perspective:

Tradition still describes how the Sikhs dispersed as soon as the battle (for Sirhind) was won, and how, riding day and night, each horseman would throw his belt and scabbard, his articles of dress and accoutrement, until he was naked, into successive villages, to mark them as his (1853; 102).

From such historical descriptions, there appears to be no basis for political order during the late 18th and early 19th century. Strife and turmoil characterised the relationships between estates, between kinsmen and between the confederacies of the Sikhs. There appeared to be no codified law that produced a predictable pattern of relationships between the numerous Sikh estates, of which there were sixteen separate ones within the district of Ambala alone. The historical documents suggest, then, a picture of political fragmentation and the absence of an established structural order to society.

Such descriptions of political life ultimately raise an important question which, as far as I can determine, is seldom raised in 19th Century historical records; namely, what was the source of whatever positive political order did exist in the Punjab during pre-British times? Obviously some source of legitimacy existed and one wonders why it escaped the attention of those who were recording the details of Punjabi life. The assumption I am making in this paper is that the political power and order that did exist was due to the peculiar ceremonial pre-eminence granted to the chiefs and petty rulers by their subjects. This



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ceremonial pre-eminence, while finding an outlet in the heroic narratives of the bards, was difficult, if not impossible, to capture in the descriptive histories of 19th Century British writers who saw the Punjab as structurally disintegrating. Let me try to suggest something of the nature of ceremony in reference to the town of Jagadhri.

The recorded history of the town begins with the Sikh chief Rai Singh, who gained control over Jagadhri in the mid-18th Century and established it as the capital of his small estate. The inhabited area of the town was bounded by ancient holy sites and the territory occupied by the earlier Rajput settlers. During the early 19th Century, merchants from surrounding areas were encouraged to settle in the town and each was given space in the bazaar sufficient to establish two shops from which to conduct their trade. By the mid-19th Century, over forty different occupational groups, or castes, were represented in the town (*Khana Shamari*, Kasbah Jagadhri; 1842). Nearly one third (527) of the total number of households (1814) were merchant households. This is perhaps not surprising when one considers that prior to British rule in the Punjab, Jagadhri was one of the two major trading centres in the Punjab, the other being Amritsar, located some 200 miles west of Jagadhri.

Rai Singh's political power did not arise from the strength of family ties or from enormous amounts of personal wealth. Still he was, at least for a time, able to mediate the many desperate elements (castes, occupational groups) found within the estate. That political leadership was not simply a reflex of already existing structural relationships is clear from the fact that even those of menial status might find themselves in political power. Thus Cunningham writes,

The succession to the leadership of the Krora Singheea confederacy may be mentioned as an instance of the uncertainty and irregularity natural to the system of 'misls'... The founder was succeeded by his nephew who left his authority to Krora Singh, a petty personal follower, who again bequeathed the command to Bughel Singh, his own menial servant (*ibid*; 107).

If we take Cunningham's observation as typical, then there appears to have been no formal rules for succession in the sense that succession would be based exclusively on prior structural rights in kinship or law. Certainly this seems to have been the case in Jagadhri where the family of the ruling

chief was never very extensive. What power the chief exercised over his estate was still better narrated by the bard than described by the historian—that is, its basis was ceremony rather than structure. As a result, issues of legitimacy which arose among his successors inevitably centred on the possession of symbolic and ceremonial prerogatives, such as the use of royal seals, forts, jewels, elephants, troops and the celebration of marriage at public expense. In addition, the chief was entitled to the services of the numerous occupational specialists who resided within his estate.

Although the chief collected the revenue and transit duties, it is clear that he never amassed great amounts of personal wealth. Expenditure was more important than accumulation and the chief often found himself in debt to the merchants who he had encouraged to settle within the town. The chief's indispensable position could only be secured by his subjects' belief that he offered them protection and prosperity based on the ceremonial arrangement of persons and events within the territory. This ceremonial position facilitated the articulation of the numerous castes and social groups which, given the nature of Hindu society, lacked any strong structural bonds with one another. Thus the chief's court was the site of ceremonial and moral authority and the nature of this ceremonial power was recorded in the ornate narrative language of the bard whose accounts celebrate the deeds of chiefs and rulers in a manner which remains "too good to be true". For the 19th Century historian and Civil Servant, the Punjab continued to be a structurally fragmented society.

### III

#### Social Structure and Commerce

I have used the term "social structure" to distinguish the workings of the merchant castes of Jagadhri from the ceremony of the ruling family and from the "spirit" which characterised the activities of the merchant classes of the West. A Hindu merchant did not engage in economic activities in response to a calling, but because of his birth. What determined one's activities and routine of daily life was, then, not a common spirit of love of work which one happened to share with others, but rather a common structural position within society.

The merchant castes of India, though numerous, were traditionally grouped

together in the Hindu scheme of things under the term Vaishya, the third of the four *Varnas*. The term Vaishya may have originally referred to "man of the people" (Hopkins: 1889; 74), or perhaps "clansman". According to Manu, the Vaishya were born from the thighs of the creator and engaged in agriculture, tending cattle and trade (Laws of Manu: X, 80-82), and "... must be acquainted with the (manner of) sowing of seeds, and of the good and the bad qualities of fields, and... must perfectly know all measures and weights" (IX, 330). According to the *Tandya Brahmana*, the Vaishya "... was created from the prajanna (the sexual parts of Prajapati); therefore he has numerous cattle, (and) he has all the gods as his patrons" (quoted in Kane: 1941; 41).

I cite these examples because I consider this cultural image of the Vaishya to be important for our understanding of the social structure of merchant communities. This structure is best revealed in the description of the details of human relationships as shaped by the vagaries of particular times and places rather than in the narratives about the moral qualities of ancient kingdoms. The cultural image of the Vaishya is based on the routine of daily life itself, on the elaboration of human, material and divine relationships and the concern with the possible loss of these resources. As a result, merchants seem to accommodate themselves with equanimity to both the successes and failures of human social and economic life.

This cultural image is significantly different from the almost exclusive concern with success as a mark of divine will which characterised the ethos of capitalism in the West. For the Hindu merchant, one retained his status in life whether successful or unsuccessful in economic, social and religious affairs. Success was therefore not an attribute of divine will, but the result of the particular circumstances of time and place. While birth accounts for the equality of caste members in substance, specific events in one's life history account for the material inequalities of those who, collectively, comprise the Vaishya. Thus a concern with the descriptive details of recent social and economic history is well suited to grasping the essentials of the social structure of merchant communities. Such a concern presents the obverse side of the narrative which celebrates the ceremonial order of the ruler.



Among the merchants of Jagadhri, the kin groups (patrilineally related kinsmen) provide one dimension of structural relationships. The kinship connections among merchants of the town are so dense and intricately woven together that my own attempts to unravel them were greeted with the simple statement that "we are all related". Such relationships refer to the complex biological and marriage links between a mass of people and events occurring within the limited time and space of the town. Many of the merchant kin groups, and particularly the larger ones, trace their founding back to the period when Rai Singh first settled merchants in the town in the mid-18th Century. Only a few extend the continuity of the kin group prior to the period of their residence in Jagadhri. But claims to any real antiquity, such as one hears from the Rajputs and other ruling families, are not a feature of the merchant kin groups, nor are they well suited for expressing a glorious or heroic past. This fact has not escaped the attention of scholars, yet it is surprising how little attention has been attached to its implications. M A Sherring, remarking on the limited family histories of the Vaishya pointed out that, "...here and there a Vaishya caste may be found with an irreproachable lineage for many generations. Yet it is hardly to be expected that any Vaishya caste should furnish satisfactory proof of its own caste purity in ancient times. Their traditions trace back their history in some cases a few hundred years; but almost every instance is confined within the limits of the period of the Mohamadan conquest of India" (1872; 347). This condition, sometimes seen as evidence for the neglect of traditional concerns among the merchants, is perhaps better understood as the positive feature of their emphasis upon description and social structure as opposed to the narrative and ceremony of ruling families.

What the Vaishya have neglected in respect to antiquity, they have gained in terms of the density and complexity of their social and material world during more recent historical times. While the heroic narratives overcame complexity, the merchant communities become visible during the 19th Century on the basis of an emphasis on such complexity as reflected in their kin groups, marriage networks, property ownership and temple building.

An example of the descriptive emphasis in the lives of the merchants of

Jagadhri can be seen in the naming of merchant kin groups. These names commonly derive from particular local happenings and ancestors associated with the past of the town. For example, the name "choriliya" refers to a merchant kin group one of whose ancestors was kidnapped from Jagadhri and held for ransom. The man was returned from captivity after several thousand Rupees were paid for his release. Hence the name "choriliya" [from *chor se liya*, taken by (from) a thief] for the descendants of the kidnapped merchant and *gali choriliyan* for the lane in which they live. Another example of this kind is the name "peth mose", the name of a merchant kin group one of whose miserly members is said to have diluted foods in order to get "more out of less" and to more easily satisfy the appetite of family members and guests. Hence the name "peth mose" (from *peth mosna*, to steal or pilfer from the stomach). Other examples of this kind could be recited. In a few instances, the names of merchant kin groups have been derived from the name of some particular ancestor or, more recently, from the name of a particular place from which a group of merchant kinsmen have immigrated (e.g., Sadhora-wale, "those from Sadhora").

Such examples are significant because they illustrate the limited historical context out of which emerges the descriptive details of the structure of merchant communities. Such details seldom dwell on the good or bad character of persons and events as seen from a moral perspective. As a result, there are neither heroic deeds nor bards to sing the praises of the merchants. Their history is expressed in the details of recent events and structural relationships established among themselves and with others with whom they deal.

What are the consequences of the structure of merchant communities upon the accumulation and distribution of economic wealth? Most importantly, material success, whether measured in terms of property, money, or, as it is occasionally, in family size is seen in terms of a series of specific descriptive events and relationships established between persons within a limited period of time and space. These relationships can be measured according to the calculations of man rather than in terms of the will of God. Such calculations and occasional ill fortune are reflected in the enormous inequalities which result from differences in the size of kin groups, different

birth and death rates, and different marriage and inheritance patterns. As a result, the factions and disputes among and within urban merchant kin groups are no less intense than those commonly described for their agricultural counterparts, the Jats. Such factions and inequalities are simply seen as the natural outcome of human social experience rather than the will of God. The essence of the merchant's status in life, his caste and ritual position based on common substance and birth, remains unaltered.

#### IV

#### Some Historical Implications of Social Structure and Ceremony

What I have tried to suggest in this paper is that social structure and ceremony referred to different functions and capabilities during the pre-British period in Punjab. Ceremony was the attribute of political strength and moral authority which bound together those who shared little, if any, structural relationships. In Jagadhri, for example, there is no evidence to suggest that the chief retained his position on the basis of such structural factors as strength of kin or family wealth. Indeed, during this period it was not uncommon to find the most powerful political figures deeply in debt to wealthy merchants. The merchants, on the other hand though enmeshed in complicated and extensive structural relationships, could not buy the ceremonial pre-eminence of the chief or ruler. Only when the British ultimately bestowed political power upon the merchants did they dare to buy the accoutrements of royalty, including royal titles, palace, elephants and other ceremonial symbols. Even then, the heroic narratives of the ruling families could never find a place in the tangle of description which provided the basis of the social structure of the merchant castes.

For the merchant caste, social structure rather than ceremony defined their functions. This status was guaranteed by birth (which by implication may have been less important for those claiming to be Kshatriyas) while individual success and failure was the result of the vagaries of time and place. The consequences of the emphasis on social structure are reflected in the densely ordered relationships and unequal distribution of wealth among members of a single merchant caste or family. These differences, instead of being a reflection of divine



will, were seen as the inevitable result of the relationships between men of the earth subjected to changing historical circumstances. One's ultimate station in life was guaranteed by birth, but one's success or failure was shaped by human experience.

It may be significant to note that the characterisation of merchant communities in terms of social structure, rather than ritual or ceremony, enabled the merchant castes to emerge as powerful groups during certain historical periods in which competing ideologies and loyalties vied for power within India. Two examples of this kind come to mind: First, merchant communities appear to have played a prominent role during Buddhist times (Thapar: 1966; 109-135), presumably because of their structural orientation to this world and the world of men. In this, the merchants appear to have had an orientation toward the world in their daily lives more akin to that of the Buddhists. Secondly the merchants and industrious agriculturists (such as the Jats) soon gained a favoured position during British rule. "The phenomenon is striking", wrote Sherring in the 19th Century, "that British rule in India tends to elevate the masses, to depress the aristocracy, to make the middle class powerful, and to introduce uniformly into all grades of native society" (*op cit*, 250). The significance of this statement rests in its recognition of fundamental changes which were occurring during the 19th Century. The "masses" and "middle class" were largely the agriculturists (such as the Jats) and merchants (Banias) and the depressed aristocracy the remnants of royalty (the Rajputs and petty chiefs). With the merchants and agriculturists, the British were able to forge new structural arrangements which reflected changing historical circumstances. These structural relationships lent themselves to an understanding of Hindu society at the level of description. At this level, persons and events were much more accessible to an outsider than the narrative accounts of the moral authority of the Kshatriyas or the ritual power of the priests. Thus it is not surprising that entree into native society was gained through the social structural bonds with the merchants and agriculturists, who were also the chief sources of revenue, rather than through the ceremonial or ritual bonds of the kings and priests which remained largely intractable to the concerns of outsiders. In doing so, the

British gradually placed the functions of both political and economic power in the hands of a single stratum of society (the merchants and agriculturists), thereby encouraging the emergence of dominant castes whose power now rested increasingly in a realisation of, in Srinivas (1959) terms, their preponderant economic, political and numerical strength. While dominance in this sense is often thought of as a traditional feature of Hindu society, it is possible that its origins rest in the transformations that were taking place in the 19th Century with the shift from ceremony to social structure, from the narrative accounts of the past to the descriptive accounts of contemporary life.

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### Madras Aluminium

MADRAS ALUMINIUM could produce only 15,769 tonnes of primary metal during 1975, as against 17,375 tonnes during 1974 and the installed capacity of 25,000 tonnes. Production was affected on account of a severe power cut. Additional power supply for increasing the capacity to 25,000 tonnes was also not made available and the company had to restrict the commissioned capacity to 22,000 tonnes which too was achieved by the end of the year. Owing to a slump in the demand for aluminium products, during the last quarter, the company could sell only 13,662 tonnes. Net sales dropped from Rs 14.23 crores to Rs 10.27 crores and gross profit tumbled from Rs 4.25 crores to a mere Rs 44 lakhs. Provision for depreciation amounting to Rs 1.80 crores has been deferred for adjustment in future. Disparity in prices between the levy and non-levy metal led to consumer resistance and poor offtake of the latter and prices had to be reduced. Even subsequent relaxation of control over aluminium had little effect on the demand for the metal. For re-start up of the stopped pots, the company had to spend Rs 43 lakhs on re-lining and start-up materials. The company had to seek additional bank facilities for increased working capital requirements. Some of the repayments to financial institutions falling due during the year were also postponed and the institutions were re-

quested to postpone rupee repayments falling due in 1976 also. These postponed instalments have now been rescheduled for payment in monthly instalments during 1977-78. The Mettur electricity system has raised bills charging penal rates for the excess consumption of power, aggregating Rs 7.25 crores. The company is making representation for cancellation of the penal levy. The directors say that Tamil Nadu electricity board had fixed quota for each industry separately, but on account of technical peculiarities of its plant the company could bring down consumption of power within allotted quota only step by step and therefore excess energy had to be consumed for a certain period. For the excess energy thus consumed, the company supplied additional EC grade metal to parties nominated by the electricity board for manufacture of conductors for use in the rural electrification programme. The board had agreed to exempt the company from penal charges for excess consumption of electricity in view of the additional supply of EC grade metal to conductor manufacturers. Final orders from the state government in this connection are awaited. In pursuance of its diversification programme, the company has finalised plans for manufacture of extruded and rolled products, special trucks and other equipments used for manufacture of aluminium.



# Water Accounting in Irrigation Projects

## A Technique from Maharashtra

Robert Wade

*Too much attention has been given to irrigation hardware in India, too little to the 'software'.*

*There are good reasons for suspecting that large improvements in the performance of canal-irrigated agriculture are possible by means of (low-cost) changes in the administrative machinery, within the limits set by existing physical structures.*

*More attention needs to be paid not only to better enforcement of crop zoning, but also to the more obvious and more neglected question of how to get better feedback to the canal operators about crops and locations, and encourage them to use that information to exert better control over water. Here the Maharashtra method of water accounting may have much to commend itself.*

WHERE water is too limited to meet all the demands of farmers (in large-scale gravity flow schemes), it may be rationed by controls over supply: by controls over the amount of water which flows to the fields, with the farmers being left free to decide which areas they will irrigate and which crops they will grow within the constraint of a fixed water supply (fixed in the sense that they cannot alter it to suit their needs). This is the 'North West Indian' model. In addition to supply-side controls, there may also be controls over demand: controls over the types of crops which may be grown and over the areas where they may be grown. If crop zoning can be enforced, it will reduce the unpredictability of water demand and permit increased accuracy of water scheduling. This demand-oriented method of control is used in much of the Deccan plateau, including Maharashtra. The problem in practice is that crop zoning proves very difficult to enforce: farmers with good water supply tend to grow irrigated crops where they are not permitted to do so, and to grow higher valued, more water-consumptive crops than allowed. In parts of Maharashtra, however, a water accounting method has been developed which allows the engineers to have up-to-date information about where exactly the water in their canal is going.<sup>1</sup> Such a feedback mechanism seems to be, if not a necessary condition for improved water control in canal systems, then at least a powerful aid in obtaining better water control, and it may be that the Maharashtra system could usefully be introduced elsewhere in India, as well as in other water-deficit regions (Dry Zone of Sri Lanka, Egypt, etc).

Most canals in Maharashtra are relatively short — normally 40-50 kilometres of main canal, with the largest being about 200 kilometres. The terrain is irregular and water is short in relation to potential demand — two conditions which have made for a

strongly 'interventionist' irrigation policy, with a highly developed method of crop zoning. Irrigated agriculture produces sugarcane (the dominant crop, not only in terms of commercial value but also in terms of the political power of sugar growers and processors, and is the crop around which irrigation has developed); also cotton, fruit, cereals; but note, little paddy. Cultivators have to decide in advance which crops they wish to irrigate and then obtain the sanction of the Irrigation Department for each crop area. At present, sanctions for the various crops are given mostly on a long-term basis, i.e. for six years or more.<sup>2</sup>

Canals are divided into a number of sub-divisions (SDs). In the typical case there are 4 SDs, each with about 16,000 ha, headed by an Assistant Engineer (AE). Under each AE are 4 Junior Engineers (JEs), each with about 4,000 ha, which constitute a Section. Each JE has a number of Canal Inspectors responsible to him, normally 6 or 7, each with about 600 ha, which constitute a Beat. The whole system is headed by an Executive Engineer (EE).

At the entrance to each SD there are measuring devices, reliable to 3-4 per cent.

At the beginning of each irrigation season the AE calculates a water indent — the amount of water he will require throughout the season. Let us take the second (dry) crop season by way of example. Shortly before mid-October, when it is known how much water will be available in the reservoir, he totals the amount of water which he will need to supply sugarcane, fruit trees, vegetables, cotton, the irrigation of which is covered by long-term agreements. Each AE sends his total to the EE, who aggregates and subtracts from the total available in the reservoir (making allowances for seepage, etc). The amount left over is the amount available for 'casual' irrigation, mainly single-season crops like wheat and jowar (the irrigation of which may also,

however, be covered by long-term agreements). The cultivators are then asked to come forward and sign single-season agreements to take water for these crops — the choice of which crops and where being left to them (I am told that in case the demand for water rights exceeds the likely supply, demand is reduced to meet supply by a proportional scaling down. To what extent other considerations — political power, bribery, the desirability in terms of reducing water loss of having irrigation in consolidated blocks rather than in scattered fields — intrude into the calculations is not known. Once the scaling down has been done, the AE issues each farmer with a chit stating the area sanctioned and the date on which the first watering will be given. (If the water does not come, the government is not liable.)

Each JE then sets about preparing a water demand statement for his Section. His calculation is illustrated in the following example:

Total crops sanctioned	8,000 ac
Sugarcane, fruit, fodder	600 ac
Other	7,400 ac

Now the canals of Maharashtra are small enough for the whole system to be closed regularly. The rotation period is 12 days open, 3 or 4 days closed. Sugarcane, fruit crops, and fodder crops get water in every rotation. All other crops (wheat, cotton, jowar, etc), get one irrigation in two rotations. Hence the 'Other' area, which gets one irrigation in two rotations, must be converted to 'equivalent' acres by dividing by two:

Total equivalent acres sanctioned	4,300 ac
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The JE knows he can irrigate about 5 acres with 1 cubic foot of water per second for 1 day. This rule of thumb is arrived at from the proposition that 1 cusec (cu ft sec) for 1 day will cover 1 acre with 2 feet of water (24 acre inches), assuming 100 per cent irrigation efficiency. If each irrigation



taken to be 3 inches, 1 day cusec will irrigate 8 acres. If irrigation efficiency is 60 per cent, each day cusec will irrigate 5 acres.

Therefore (assuming an irrigation efficiency of 60 per cent) he requires  $4,300/5 = 860$  day cusecs. The rotation period is 12 days. Therefore he requires a daily flow of  $860/12 = 72$  cusecs.

The JE's total is added to that of other JEs to arrive at the amount which must be released from the reservoir per day over the rotation period. The EE can compare actual discharge from the reservoir with the needed discharge, and make adjustments accordingly.

Each AE knows the discharge into his SD. Say it is constant at 600 cusecs. The total volume of water received is  $600 \times 12$  days = 7,200 day cusecs. Allowing for a further 20 per cent loss of water from the outlet to the field (reducing the area irrigated by 1 day cusec to 4 acres), the AE knows that this volume of water should have irrigated about 28,800 acres. He can then compare this with reports from his field staff (and farmers) about the actual area irrigated. Each cultivator who takes water has an Irrigation Pass Book, issued by the AE when the cultivator's water is sanctioned at the beginning of the season. At the end of each rotation the farmer must allow the Canal Inspector to sign it if he has got water.<sup>3</sup>

At the end of each 12-day period, an audit is carried out of water received and area irrigated. Divergencies between 'warranted' area irrigated and actual area irrigated can then be spotted for each (relatively small) SD, divergences which may be due to leakage, unauthorised irrigation, etc. The AE can then mount an investigation. The great advantage of this method of keeping tabs on water is that the engineers can find out frequently throughout the irrigation season where things are going wrong. It makes favouritism at the field staff level much more difficult to conceal: if the water account does not balance, the AE sends an investigator; if the investigator finds that a cultivator is taking water he is not entitled to, he knows whose neck to wring: the Canal Inspector's, for not reporting the offence. And it means that if a farmer is not getting his due water, there is a very rapid and frequent channel of feedback to the controllers of the system. There is some room for abuses, of course; but much less than on most South Indian

systems, where no such water accounting is carried out.

One problem with this method, as practised in Maharashtra so far, is that the fixed 12 day rotation cycle means that sometimes the distributories are flowing far short of capacity, and seepage is therefore high. (Seepage is proportional to wetted area, and the further below full capacity the actual level is, the higher the ratio of wetted area to volume of flow.) There is now a move away from the fixed 12-day period; the tendency now is to give each Section or minor canal its full capacity discharge and stop the flow completely when the requisite amount of water has flowed, rather than keep the channel flowing at a lower level for the full 12 days.

Another problem is that most of the engineers' time has been spent doing mathematical calculations or handling the enormous volume of paper work required by the agreement system<sup>4</sup> (and also by the complex penalty system, without which the agreement system is useless), rather than having contact with farmers and field staff. Could the administrative burden not be lightened, without sacrificing too much control?

Could such a method of water accounting be usefully introduced in other areas with similar topography and crop zoning, but with longer canals and with paddy as one of the principal crops (for instance, in the Tungabhadra canals of Karnataka and Andhra Pradesh)? At present canals in the South are closed for only one to two months per year (or less), in a continuous period. It would seem highly desirable for the irrigation season to be broken up into a number of periods (not necessarily as short as in Maharashtra), between which all major distributories are completely closed (the length of the canals, and hence the time taken for filling, may rule out closure of the whole canal system). During the closure period, an accounting of the Maharashtra kind would be done. There is now good evidence that paddy yields do not suffer if water is not kept standing in the field, as long as the ground remains soggy. (Weeding becomes a problem of course, which is part of the reason why farmers like to have water standing in the field all the time; but in the environments under discussion water, not labour or land, is the limiting factor, and sensible policy should adopt those measures which maximise output and employment per unit of

water. Paddy tends to be heavily over-irrigated in the South (sometimes by a factor of five or six times), and periodic closures of the major distributories might help prepare farmers to accept the inevitable: more systematic rotational irrigation of paddy, as is practised in some parts of East and South East Asia, and even in new paddy areas of Northwest India, where paddy has been fitted into the rotational practices previously used for wheat and similar cereals.

But in parts of the South a more basic requirement is still to be met. Even without periodic closures, it would be possible for the canal operators to have better information about the location of crops and the stage of crop growth. At present, it is not uncommon for the EE and the AEs to have no systematic data on the location and area of different crops until halfway through the irrigation season, or later. That means that the daily gauge readings of water levels at various points of the canal network are much less helpful than they would otherwise be for spotting areas where something is going wrong; because the operators do not know what the readings should be if everything is going right.

But there is a further difficulty. At present, the EE and AEs not uncommonly do not have any data at all, even for the previous year, on a reach-wise basis (e.g. 0 miles-50 miles, 50 miles-73 miles, etc). The reason is that the primary purpose of the Irrigation Department in collecting data about crops and areas is to provide a check on the Revenue Department. The Revenue Department is responsible not only for collecting water rates but also for assessing each farmer's due. The village-level functionaries of the Revenue Department have strong incentives to conceal some of the irrigated area, in return for part of the payment which would otherwise go to the government. That makes the utilisation of capacity appear to be lower than it actually is, and the Irrigation Department is likely to suffer public criticism for poor performance. Hence it collects its own figures of irrigated area, which turn out to be always considerably higher than those of the Revenue Department. (I understand that it is the Irrigation Department's figures on which published irrigation statistics are based.) Since the Revenue Department collects its figures on the basis of revenue-collection units — notably *taluks* (sub-divisions of districts) —



the Irrigation Department does the same. The information which the EE and the AEs want therefore relates to taluks. Now the boundaries of a taluk may weave backwards and forwards across a canal, so that, to take an example, in the reach from mile 50 to 73, mile 50 to 61 may be in one taluk, mile 62 to 69 in another taluk, and mile 70 to 73 in the first taluk. If an engineer wants to know how effectively the water entering mile 50 is being used up to the end of the reach (reaches are normally defined by suitable physical control structures in the canal, such as main gates, so their definition relates to units of control, and is not arbitrary) he cannot know: all he has is the information, probably for the previous season or year, on taluk one and taluk two. It would be perfectly possible for the village-level data to be aggregated on a reach-wise rather than (or in addition to) a taluk basis; only the fact that the engineers do not see the need for reach-wise data prevents them from getting it.

Too much attention has been given to irrigation hardware in India, too little to the 'software'; and the same applies to irrigation policy in most countries. There are good reasons for suspecting that large improvements in the performance of canal-irrigated agriculture are possible by means of (low cost) changes in the administrative machinery, within the limits set by existing physical structures. In particular, improvement in one of the key performance criteria of irrigation systems, the accuracy of water scheduling in relation to crop water requirements, depends on administrative change, to (a) get more accurate information about variations in water supply and water demand, and (b) reduce the unpredictability of demand by better enforcing certain controls over cropping patterns. As noted earlier, crop zoning is widely attempted on canals of the Deccan plateau. My suggestion here is that more attention needs to be paid not only to better enforcement of the crop zoning, but also to the more obvious and more neglected question of how to get better feedback to the canal operators about crops and locations, and encourage them to use that information to exert better control over water. I suggest that the Maharashtra method of water accounting may have much to recommend it. To be more confident, however, we need studies of how the method works in practice. The same applies more generally: improvements in canal administration will be more successful if

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based on knowledge of how canals are administered in practice. The 'in practice' is important, for there are several generalised accounts of how canal administration is designed to work in principle in different parts of India.<sup>5</sup> What is lacking in these accounts is an interest in the divergence between principle and practice, such as I have sketched for information feedback on southern canals; and an interest in the fussy organisational details of canal administration in various parts of India, such as I have sketched for the Maharashtra method of water accounting.

The National Irrigation Commission's terms of reference included: "to examine the administrative and organisational set-up for the...operation of irrigation works..." (1972:8). The Commission's Report, however, has virtually nothing to say about matters of the kind I have discussed here.<sup>6</sup> Its diagnosis of the malaise of existing projects runs largely in terms of inadequate physical structures, plus poor co-ordination between government

departments. "The ills which have beset so many projects could be cured only by introducing modern concepts of water-shed and water management, soil conservation and drainage, by modernising and streamlining canal systems, and by putting up reservoirs." (1972:4) It is to be hoped that the next Irrigation Commission will pay more attention to the operating procedures of the irrigation bureaucracy itself.

### Notes

- 1 I owe this account of the Maharashtra accounting method to a Maharashtra irrigation engineer, S N Lele, whom I met in Andhra Pradesh. I have not seen the system working on the ground.
- 2 For general accounts of irrigation organisation in Maharashtra, see Report of the National Irrigation Commission, 1972, Vol I, Chapter 6; Khursala, N V, and P R Gandhi, "Management of Irrigation Waters in Maharashtra", in Central Board of Irrigation and Power, Symposium on Management of Irrigation Waters, Publication

No 92, May 1969; Maharashtra State Irrigation Commission Report, Government of Maharashtra, 1962, esp Ch 5.

- 3 One wonders what the sanction is: what happens if the farmer does not allow the Canal Inspector to sign the Pass Book; how much pressure there is, or can be, on the Canal Inspector, to carry out this duty faithfully.
- 4 The paperwork is enormous even though many of the agreements are long-term. There is likely to be a real trade-off between having an agreement system which is flexible enough to permit adaptation to new conditions, and having a high degree of cost-saving routinisation in irrigation administration. Or, as Ronald Dore put the point with less inhibition: "Maximum routinisation should be the aim of all irrigation systems." I thank him for this and other useful comments on the paper.
- 5 See references in note 2.
- 6 The Maharashtra State Irrigation Commission Report is also almost silent on these matters.

# Problems and Prospects of Sugar Industry

By

**Madhava Prasad**

**President, Indian Sugar Mills Association**

DURING the financial year ending March, 1976, the performance of the Sugar Industry in the field of exports has been indeed spectacular; sugar exports totalling to 12.02 lakh tonnes, earning a foreign exchange of about Rs 475 crores, the highest for any commodity exported during the year, thus helping the nation towards better balance of payments position. This also included a rupee profit for the Exchequer of about Rs 155 crores. Unlike many other commodities, the increase in the foreign exchange from sugar exports was due mainly to the increase in the quantum of exports.

Undeniably, such large exports became possible due to the record sugar output of 48 lakh tonnes achieved during the 1974-75 season. It is unfortunate that there has been a sharp

decline in the sugar output this year which is now finally placed around 42.6 lakh tonnes showing a drop of 5.4 lakh tonnes from the last season's record output. Its immediate impact has been felt on our ability to maintain exports and government have been compelled to reduce the export allocations to a bare six lakh tonnes. Such setback in output has been caused primarily due to large-scale diversion of cane to khandsari and gur. The absence of excise rebates was another serious handicap this year. Consequently, sugar factories could not start early with lower recoveries, as compensatory excise rebates were not there. The sugar output of 2.55 lakh tonnes achieved this year in the initial months of October and November is the lowest ever produced over the past 7 years during these months. The average variation in the output of gur and khandsari taken together during the 15-year period from 1960-61 to 1974-75 has been only marginal being 1.4 per cent. In case of sugar the

variations are as high as 6.2 per cent almost 4.5 times that of gur and khandsari. With numerous advantages which khandsars now enjoy, their production has been going up from year to year. As long as its supplies are in abundance, free sugar rules at highly uneconomical rates and factories have to dispose of their free sugar quotas at such prices. It is only with the khandsari pressure diminishing that the free markets tend to steady up. Unfortunately, this gives a wrong impression and provokes public criticism against the industry.

The larger interests of the industry would be served not by occasional price spurts in the free market, but only by a sustained and steady level of prices throughout the year. Considering the large-scale production of khandsari sugar, if price stability in free markets has to be ensured, it appears, the present policy of monthly quota releases would need to be strengthened further with some regula-

Adopted from the Presidential Address of Shri Madhava Prasad, at the 43rd Annual General Meeting of the Indian Sugar Mills Association, held in New Delhi on 26th August, 1976.



tory measures on khandsari supplies as well.

In fact, it would be desirable for the government to consider an integrated and co-ordinated policy covering all the aspects of the working of gur and khandsari industries. A comprehensive sugar policy is now an urgent necessity which would apply equally and uniformly to all the three sweetening agents to maintain production and price stability on the one hand and maximise sugar exports on the other.

Free market prices cannot be considered in isolation. They have to be reckoned with the highly unrealistic and uneconomic levy prices. The industry has to deliver 65 per cent of its output at such prices. It is hoped that the new cost schedules to be prepared by the Bureau of Industrial Costs and Prices will be found realistic and will meet the needs of the situation.

With an uneconomic price structure to the industry over the period, its profitability has been seriously undermined. The position has been progressively deteriorating and the percentage of loss making units has been going up. From 23 per cent in 1972-73, it went up to 47 per cent in 1973-74. During 1974-75, their percentage is as high as 66 per cent. On Hon'ble Finance Minister's own admission in the Lok Sabha on August 10, 1976, the prices allowed to the industry were unremunerative which had rendered many sugar mills "sick".

The Sugar Enquiry Commission went into the question of sickness in the industry in depth. It has conclusively established that the sickness was more or less uniformly spread in the old as well as new units, in all the sectors of the industry and units located in every region of the country, and there was no ground to suggest that on an overall basis either one or the other sector or one or the other region was distinctly superior. To check further spread of sickness, a remunerative price structure to the industry has to be ensured.

The rate at which sickness has been spreading in the new units is indeed alarming. On the admission of the Chairman, Maharashtra Rajya Sahakari Sakhar Karkhana Sangh out of 42 co-operative sugar factories working in the state, 22 had already gone sick and this process was continuing. In his recent study, Shri N S Kharkar, a sugar technologist from the DSTA has concluded that "out of 32 co-operative factories under study, 13 factories had together unduly expanded their crushing capacity by a gross total of more

than 8,000 tonnes per day crushing, even though they had inadequate assured cane from their members, for crushing for a period of 150 days. Some of these factories have been established since last 10 to 15 years and it is pertinent to note that they still could not develop enough cane in their allocated area of operation, even for their initial crushing capacity. This only shows that either the selection of the site for these factories was wrong or at least the expansion in their crushing capacity was not warranted. The tremendous capital invested on these expansions can be considered as a waste of public money". Shri Kharkar has therefore further concluded that the work on all the proposed sugar factories, where erection has not yet started, should be suspended immediately, till all the existing factories in production are assured adequate cane for crushing for 150 days.

What has today assumed serious proportions in Maharashtra is gradually spreading in other states also. Licences for new co-operative factories/public sector factories have been issued without regard to the cane availability in the area. In most cases such licences have been issued for sites, in close proximity of the existing units disregarding the government's own declared assurance that new units would not be located within a radius of 50 kilometres of the existing units.

It is necessary that a Central independent authority is created to hear grievances of the affected factories and till this authority has disposed of the same, new licences should not be granted. Even the licences already granted, but where no tangible steps have been taken to implement the same, these should be kept in abeyance pending investigation by the said authority.

For maximisation of sugar output, a policy of excise rebates on the pattern, as recommended by the APC should be revived with the modification that the earlier period of October/November should constitute a separate period. This is essential to induce early start by factories and prevent diversion to gur and khandsari when growers are anxious to vacate their fields for sowing other crops like wheat. Early announcement of adequate excise rebates would have a salutary effect on sugar markets also as that would restore the confidence of the markets in the continued

adequate supplies of sugar for free sale.

For stepping up sugar output, it is equally significant and urgent that the excise duty on free sugar which has been progressively raised to the high rate of 45 per cent *ad valorem*, should be reduced to minimise the present tax disparity between sugar, khandsari and gur to prevent diversion of cane from factory areas. Even government's revenue considerations and the need for earning foreign exchange would underline the urgency for such reduction.

The statutory minimum cane price for 1976-77 should be raised from the level of Rs 8.50 to Rs 10 per quintal linked to a basic recovery of 8.5 per cent. While it is true that the actual cane prices paid by factories are higher it is this price to which growers look for stability and it goes to influence the cane acreage materially.

It is a happy augury that during the 5th Plan period Government of India have prepared a programme for development of sugarcane. However, the financial outlay which was initially contemplated at Rs 27 crores but subsequently scaled down to only about Rs 11 crores is too low having regard to the magnitude of the problem and the need for developing vast areas. The outlay needs to be revised suitably consistent with the task involved. Similarly, there is need for better co-ordination between the various research institutes in the country so as to ensure that fruits of research reach the fields expeditiously.

### British Paints

BRITISH PAINTS (INDIA) has stepped up dividend from five per cent to 17.5 per cent on the increased capital, even though it earned almost the same as in the previous year despite higher sales. The directors consider this outcome satisfactory in view of the competitive conditions that prevailed during 1975 owing to the demand recession. The company has made a rights-cum-public issue of 2,62,282 equity shares of Rs 10 each at par in May 1975 to increase the Indian capital in its equity and to finance larger working capital requirements. The issue was oversubscribed and the allotment was made in July 1975. The directors envisage a further improvement in the company's working results this year. Sales in the first half have been "substantially better" than they were in the corresponding period in 1975.





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**WEEKLY**

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# New Zealand declares BHEL the winner!

**BHEL has won yet another test of merit. It will supply all the eight 53 MW hydro generators for the Ohau B and C power stations—providing 424 MW of additional power to New Zealand.**

Excerpts from a press release issued by the Minister of Electricity, Government of New Zealand: Contracts have been awarded by the New Zealand Electricity Department for Main Generating Equipment for the Ohau B and C Power Stations, the Minister of Electricity, the Hon. E.S.F. Holland, announced today...

The eight 53 MW generators will be supplied by Bharat Heavy Electricals Ltd. of India... The contract is one of the largest ever awarded by the Department for Hydro Power Station Equipment. The size of the contract attracted international attention and tenders were received from 12 countries. The contract was awarded purely on the basis of technical and economic merit, decided by the Department after close investigation of the ability of the company to comply with contract conditions.

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# ECONOMIC AND POLITICAL

# WEEKLY

**Founder-Editor: Sachin Chaudhuri**

**Vol XI No 36 September 4, 1976**

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## Sweeping Changes

ON Wednesday this week the Law Minister introduced the Constitution (44th Amendment) Bill in the Lok Sabha. The title of the bill is a misnomer, for what it seeks to do is not to so much amend this or that part of the Constitution as effectively to revamp it. The changes proposed in the bill cover as many as 59 provisions of the Constitution; more important, many of these changes are so far-reaching as to fundamentally alter the relative positions of the parliament, the executive and the judiciary; of the Union and the states; and of the citizen and the State. Such sweeping changes are to be considered and enacted by a parliament whose regular five-year term has expired.

The provisions of the Constitution Amendment Bill call for detailed examination, but one of the most ominous changes is the proposed amendment to Article 31. The bill introduces a new Article 31D which lays down that no law providing for "(A) the prevention or prohibition of anti-national activities, or (B) the prevention or formation of, or the prohibition of, anti-national associations, shall be deemed to be void on the ground that it is inconsistent with, or takes away or abridges any of the rights conferred by Article 14, Article 19 or Article 21". The definition of "anti-national activities" is as comprehensive as could be and covers, *inter alia*, activity which is intended "to overthrow by force the government as by law established", "to create internal disturbance or the disruption of public services" or "to threaten or disrupt harmony between different religious, racial, language or regional groups or castes or communities". Laws intended to prevent or prohibit "anti-national activities" defined in the above manner shall be deemed to be valid even though they may contravene the fundamental rights to equality before law and equal protection of the law (Article 14), to freedom of speech and expression, assembly, association, etc (Article 19) and to not be deprived of property save by authority of law (Article 31). The likely effect of this amendment in terms of enlarging the powers of the government and prohibiting or restricting normal political and trade union activity calls for anxious consideration.

Enlargement of the executive's powers and restriction of the scope of judicial review are sought to be achieved through a number of the amendments proposed in the bill. The amendment to Article 77 bars courts and any other authority from requiring the production of administrative rules framed "for the more convenient transaction of the business of the Government of India". Through the insertion of new articles 131A, 139A, 226A and 228A, the High Courts are sought to be deprived of their power to adjudge the constitutional validity of Central laws. The proposed new Article 144A lays down that any Central or state law can be invalidated by the Supreme Court only by a two-thirds majority. The same requirement will hold for High Courts to invalidate a state law. The power of the High Courts to issue writs as well as interim orders or stay orders is also sought to be curtailed. The courts are barred from adjudging the validity of constitutional amendments except for seeing that Parliament has followed the prescribed procedure.

It is also proposed to empower Parliament to set up administrative tribunals to deal with service matters pertaining to government employees and to exclude the jurisdiction of all courts in such matters (except the Supreme Court's power to grant special leave of appeal under Article 136). Similarly Parliament and the state legislatures are also to be empowered to set up tribunals to deal with certain specified subjects, including industrial and labour disputes, once again excluding the jurisdiction of all courts.

Some of the proposed amendments tilt the balance of Centre-state relations in favour of the Centre. The new Article 257A would empower the Centre to deploy the armed forces of the Centre or any other forces in any state. The proposed amendment of Article 352 will enable the Centre to proclaim a state of emergency in any part of the country. Also education, administration of justice, forests, population policy and protection of wildlife are sought to be transferred from the State List to the Concurrent List.

The restriction sought to be placed on the fundamental rights are implicitly justified by the premise that the constitutional protection afforded these rights has come in the way of the pursuit of progressive measures designed to improve the lot of the poor. Hence the demonstrative effort to be seen to be giving precedence to the directive principles of State policy over the fundamental rights. Article 31C is now to be so amended as to read: "notwithstanding anything contained in Article 13, no law giving effect to the policy of the State towards securing all or any of the [directive] principles laid down in Part IV shall be deemed to be void on the ground that it is inconsistent with, or takes away or abridges any of the rights conferred by



Article 14, Article 19 or Article 31". And "no law containing a declaration that it is for giving effect to such policy shall be called in question in any court on the ground that it does not give effect to such a policy". There is, let it be emphasised, no attempt to make any of the directive principles enforceable or justiciable. The State is not bound to take steps to ensure any of the very laudable objectives embodied in the directive principles (for example, securing the right to work and to a living wage, or even the provision of free and compulsory education for all children upto the age of 14 years — something which was to have been done within 10 years of the commencement of the Constitution).

The dichotomy posited between the directive principles and the fundamental rights is largely an arrangement of political convenience, especially so far as the freedoms guaranteed by Article 19—as distinct from the right to property ensured by Article 31 — are concerned. And yet experience shows that it is these freedoms which get progressively eroded while the right to property is retained intact.

## Kudremukh

### Over to US Steel

THE Union Minister of State for Steel and Mines the other day described the Kudremukh iron ore project as a shining example of co-operation between India and Iran. It now transpires that the project is to be an example of co-operation between India and other parties as well. Like the US Steel Corporation, the biggest steel company in the US.

It has just been disclosed that a wholly-owned subsidiary of US Steel, Met-Chem Consultants of Montreal, has been appointed "mining associates and engineering constructors" for Kudremukh. Met-Chem, it appears, will be in complete charge of the project. It is to be responsible for planning, design, engineering, procurement services, project management and supervision. Not merely that, it will also be responsible for operating the plant during the first three years of production. Met-Chem is supposed to do all this "under the overall control" of the Indian company, Kudremukh Iron Ore Co Ltd. However, that is a meaningless formality, since it is clear as daylight that what Met-Chem, or rather US Steel, has been awarded is a turn-key contract.

Why was it necessary to do this? Iron ore mining is not something unknown to us. In 1975-76 we produced 42 mn tonnes of iron ore and exported over one-half of that quantity. It may be that the Kudremukh project has certain technological features such as transport of ore from the mine-site to Mangalore port in slurry form through a pipe-line — some of these features, incidentally, will significantly reduce the employment potential of the project and are, therefore, themselves questionable on that count — but it should have been possible to restrict the involvement of foreign consultants and technology to specifically these areas without having to hand over the responsibility for the entire project to a foreign company.

The reasons for awarding the turn-key contract to Met-Chem are not technological primarily. They are related to the terms of the agreement with Iran under which Iran is lending us \$ 630 million for the project in return for a commitment on our part to export to that country 150 mn tonnes of iron ore over a 20-year period. Though the details of the agreement have not been disclosed, it is known that we have undertaken to begin shipments of ore in September 1980, or just four years from now. It is also known that we have agreed to onerous penalty clauses in the event of our failure to do so. And apart from the specific clauses of the agreement, the very acceptance of an arrangement under which another country meets the entire cost of a project will inevitably involve several restrictions on our control over the planning and execution of the project.

The Kudremukh project thus raises a number of important questions. Should we at all plan for large-scale exports of a raw material like iron ore? Second, is it wise to tie ourselves down to a single buyer? Third, what is the cost-benefit of accepting credit, even if it be from a Third World country like Iran, when this necessarily involves accepting foreign collaboration and technology in areas where we can substantially do without them?

## Jammu and Kashmir

### A Deviation

ON the face of it, the reaction of the Congress leaders in Jammu and Kashmir to the defection of 10 dissident members of the Congress legislature party

to the National Conference might seem unnecessarily sharp. After all, political defection has an ancient, even respectable tradition behind it. And as recent events in Gujarat and Goa show, the practice of the art has by no means died out. But Jammu and Kashmir is not just another state. Besides, the defections to the National Conference signify the undoing of the compact under which the Congress party had "voluntarily stepped down from office" to enable Sheikh Abdullah to become chief minister.

When the "voluntary" stepping-down took place, in a rather unique move Sheikh Abdullah — who was not even a primary member of the Congress — was 'elected' the leader of the state Congress legislature party in the presence of D K Barooah and Karan Singh. Thereafter he was formally invited by the governor to form the government. The Congress strategy was to vest the Sheikh with the office of chief minister while retaining for itself substantive control of the state apparatus through the — as it was hoped — all pervasive presence of the party. Sheikh Abdullah had no formal organisational base and it was hoped that he would be content to function as head of government without bothering to transform his undoubted popular support — which after all was the factor which had led the Centre to come to a settlement with him — into specific organisational channels independent of and different from the Congress.

In fact, the general expectation then was that while Sheikh Abdullah himself would remain nominally outside the Congress party, his followers who had till then organised themselves under the banner of the Plebiscite Front would dissolve that organisation — whose 'reason for existence' ceased following the political settlement — and merge with the Congress. The Plebiscite Front did in due time dissolve itself; but this was followed, not by merger into the Congress, but by the revival of the National Conference towards the end of June 1975, and the formal re-entry of Sheikh Abdullah into that organisation in October.

This revival of the National Conference in Jammu and Kashmir, and its continued political relevance and viability during the last one year present a significant deviation from the general line of political development envisaged by the Centre and the Congress for that state. These developments are also out of time with developments in, for example, Tamil Nadu, Uttar Pradesh, Gujarat, Goa, Manipur and Nagaland.



where, in the special circumstances of the last one year or so, the Congress has been engaged in recovering the ground it had lost in the sixties to regional parties and groupings. Despite the success achieved in Tamil Nadu, Nagaland and Gujarat, and what practically amounts to success in Meghalaya and Goa, Jammu and Kashmir seems to continue to pose a problem. Not merely have Sheikh Abdullah and his followers not joined the Congress but they have revived a party which to all appearances was moribund if not actually dead.

## Cotton

### Grim Prospects

IF the current crisis in the cotton situation was entirely due to the shortfall in cotton output in 1975-76, from an anticipated 7.6 million bales to an actual 6.5 million bales, the emergency import measures resorted to in July last should have eased the crisis. Already, the contracted imports amount to 1.10 lakh bales. But neither the imports, which by the time the second instalment is contracted, are expected to amount to Rs 70 crores, nor the other "drastic measures" initiated in July last to control the situation, like the instructions issued to textile mills to reduce their cotton holdings or the restrictions placed on the availability of bank credit to mills to buy (and hoard) cotton, seem to have had any impact on the situation. The price of cotton, after steeply rising and in fact substantially contributing to the overall rise in the price index, has not shown any sign of coming down.

Meanwhile, there are indications that the imports of cotton might, far from easing the situation, actually worsen it. The price of imported cotton, even after the removal of import duty, is much higher than that of the domestic variety even at the latter's present very high price. The result is greater pressure on the inadequate domestic supplies, which only push prices further up. There have been reports that textile mills are now unwilling to accept the imported cotton, having failed to come to an agreement with the Cotton Corporation of India on its price.

All in all, the prospects seem a worsening of the present crisis, and a possible worsening of the 'sickness' of the textile industry. The prospects

for thousands of textile workers are distinctly grim.

## Israel

### West German Connection

#### A Correspondent writes:

ACCORDING to *Wehrtechnik*, a West German military affairs journal, Israel is at present in possession of 13 atomic bombs each having the same destructive capacity as the bomb that fell over Hiroshima and Nagasaki in 1945, namely, 20 kilotons. The Israeli airforce says a recent issue of the journal (which is highly respectable and has on its board of editors top-ranking retired and serving Bundeswehr officers as well as leading representatives of the government and industry) is at all times in a position to get these bombs transported and dropped over enemy territory with the specially built Kfir and Phantom hunter-planes. In the first days of the 1973 West Asia war, as the Egyptians were advancing on the Suez front, the nuclear warheads had been "made ready to take off from an underground tunnel". Only the turn that the war took in the following days prevented their use.

Speculations about Israel being in possession of nuclear weapons are not new. But the existence of Israeli atomic weapons has never been affirmed so definitely till the *Wehrtechnik* revelations. The origins of the Israeli atomic bombs go back to the days-in-office of the first Israeli President Chaim Weizmann, who encouraged the scientists to engage themselves with the bomb. The required raw materials were available at home: the phosphate deposits in the Negev desert also brought with them uranium. Besides, the Israeli scientists developed a technique to produce heavy water. "In exchange for this knowledge", states *Wehrtechnik*, "they were allowed in 1953 to study the French nuclear programme and to participate in the Sahara atomic tests. Four years later, France provided Israel its first nuclear reactor. France also assisted in the establishment of a research centre at Dimona in the Negev desert. The first Dimona reactor went into operation in 1964. Then, Premier David Ben-Gurion camouflaged it as a textile factory."

Government bodies like the Israeli national security council were, according to *Wehrtechnik*, against the pro-

duction of an Israeli atom bomb. But the former Israeli defence minister Moshe Dayan had ordered their production in strict secrecy, so that Premier Levi Eshkol, despite his reservations had no alternative but to approve of the already running project.

Even though Israel has not dropped a bomb, the project has already taken human lives. Dimona is guarded day and night by troops, a highly sophisticated electronics system, as well as radar. Even Israeli planes are not allowed to fly over this sensitive area. During the six-day war, an Israeli Mirage III mistakenly happened to fly over this prohibited area and was immediately shot down by the Israeli airforce ground troops guarding Dimona. The shooting down of a Libyan civilian Boeing 727 in February 1975, because "it had violated air space over a very sensitive area" resulted in the death of 108 persons. At that time, the true dimensions of the Israeli action were not clear. But when one considers that the Israelis wanted to keep the production of atomic bombs a strictly guarded secret, the incident would appear quite consistent with Israeli's conception of its security.

Though the *Wehrtechnik* does not say anything about the involvement of West German military establishment and armament industry in Israel's nuclear project, it is widely known that since 1964 over 5,000 Israeli officers and soldiers have been trained in West Germany. More than 500 West German specialists have been engaged in the Israeli armaments industry and even in Dimona over a 100 West Germans were employed. In addition, in the field of nuclear research, Israel and South Africa maintain close contacts, and South Africa has always had the best of relations with West German firms like Siemens, Krupp, AEG-Telefunken and Steag.

In this context, it is interesting to note that the Max Planck Institute for Plasma Physics in Garching, near Munich, is working on the development of lasers which could be used for the separation of isotopes. The Garching Institute is said to maintain close relations with the Israeli scientists engaged in the development of highly sophisticated lasers. The significance of such research projects lies in that, once accomplished, they would enable even the smaller countries to manufacture their own bombs at relatively low costs.



# 6 Per Cent State Government Loans, 1986

State	Amount of Loan (In crores of Rupees)
*1. Andhra Pradesh	11.25
2. Haryana	7.25
3. Himachal Pradesh	1.50
4. Jammu & Kashmir	2.25
*5. Maharashtra	11.75
6. Meghalaya	1.25
7. Manipur	1.50
8. Nagaland	2.00
9. Punjab	4.75
*10. Tamil Nadu	11.50
11. Tripura	1.50
*12. Uttar Pradesh	26.25
*Second issue	<u>82.75</u>

All the above loans will be issued at Rs. 99.00 per cent and will open for subscriptions on Wednesday, 15th September 1976 and close on Saturday, 18th September 1976 or earlier without notice as soon as subscriptions approximate to the amount of each issue. All the State Governments reserve their right to retain subscriptions upto ten per cent in excess of the notified amounts.

The loans will be redeemable at par on 24th August 1986. Interest, on the above loans for the period 15th September 1976 to 23rd February 1977 inclusive will be paid on 24th February 1977 and thereafter payment of interest will be made half-yearly on 24th August and 24th February each year. Interest in respect of all loans will be liable to tax under Income-tax Act 1961. Interest on Government securities along with income in the form of interest or dividends on other approved investments will be exempt from Income-tax subject to a limit of Rs. 3,000/- per annum and subject to other provisions of Section 80L of the Income-tax Act, 1961.

The value of investments in the Loans now issued together will the value of other previous investments in Government securities and the other investments specified in Section 5 of the Wealth Tax Act, 1957 will also be exempt from the Wealth Tax upto Rs. 1,50,000/-.

Subscriptions may be in the form of CASH/CHEQUE.

Applications for *all the loans* will be received at the offices of the Reserve Bank of India at Ahmedabad, Bangalore, Bombay (Fort and Byculla), Calcutta, Hyderabad, Kanpur, Madras, Nagpur, New Delhi and Patna and the State Bank of Bikaner and Jaipur at Jaipur.

Applications will also be received at *other places within the respective States* as follows:

- Branches of the Subsidiary Banks of the State Bank of India conducting Government treasury work except at Hyderabad;
- Branches of the State Bank of India at places where there is no branch of its Subsidiary Banks conducting Government treasury work; and
- In the case of Jammu & Kashmir loan, applications will be received at branches of the

Jammu & Kashmir Bank within the State of Jammu & Kashmir and branches of the State Bank of India where there is no branch of Jammu & Kashmir Bank.

Applications for Haryana and Punjab State Government Loans will also be received at State Bank of India, Chandigarh.

Securities will be issued in the form of Promissory Notes or Stock Certificates. The advantages of investing in the form of Stock Certificates are as under :—

- It is safer than a Government Promissory Note as the name of the holder is registered in the books of the Public Debt Office.
- The Stock Certificate will be sent to the applicant direct by registered post by the Public Debt Office.
- The half yearly interest will be remitted to the holder direct by an interest warrant drawn at par on any Treasury or State Bank branch stipulated by the holder. If the holder so desires, the interest will be remitted by Money Order after deducting the Commission charges.
- If the holder wishes to sell his securities he can do so by signing the transfer form printed on the back of the Certificates in the manner prescribed therein.
- Government Promissory Notes in exchange for the Stock Certificate can be obtained by applying to the Public Debt Office and on payment of a nominal fee for each new note required.

Copies of the Notifications and Application Forms may be obtained from any of the Receiving Offices mentioned above.

In the event of over-subscription to the loan applied for, applicants tendering applications at the offices of the Reserve Bank of India at Ahmedabad, Bangalore, Bombay (Fort and Byculla), Calcutta, Hyderabad, Kanpur, Madras, Nagpur, New Delhi and Patna will be given the option of transferring their cash refunds to any other State Government loan which may still be open for subscription. To avail themselves of this facility, applicants should complete the "Special Option Form", copies of which can be obtained at any of the offices of the Reserve Bank of India mentioned above and tender the form along with their applications.



## Clippings

Private corporate dividend declarations during 1975-76 showed that 54 per cent of companies increased their rate of dividend during 1975-76 and another 25 per cent maintained the previous year's level of dividend.

*The Economic Times*, September 2

The quantum of bonus issues for 1976 as a whole is likely to cross Rs 100 crores ... The recent amendment to the rules regarding transfer of profits to reserves ... may induce a large number of companies to make bonus issues.

*The Economic Times*, August 26

A high-level working group appointed by finance minister C Subramaniam is believed to have recommended tax concessions, exemption from certain provisions of the company law and adequate credit facilities to sick units voluntarily choosing to merge with a healthy unit.

*The Economic Times*, September 1

Industries may be granted exemption under the Urban Land (Ceiling and Regulation) Act, 1976, if such exemptions are considered necessary for their expansion or diversification or efficiency, reports Samachar.

*The Economic Times*, August 30

The Union Government, in a marked shift from its earlier policy, has now an open mind on the question of cash equity participation by Indian parties in joint ventures abroad.

*Financial Express*, August 30

The Union government has decided to involve the subsidiaries of multinational drug companies operating in India in its export effort.

*Business Standard*, September 2

The Oil and Natural Gas Commission on will soon be commissioning a foreign contractor to do a seismic survey of the offshore areas around the Andaman and Nicobar Islands.

*Business Standard*, August 30

A Canadian Company, Met-Chem Consultants Ltd, Montreal, has been awarded a letter of intent on August 31 appointing it as mining associates and engineering constructors for the giant iron ore mining and concentration project of the Kudremukh Iron Ore Co Ltd ... Met-Chem is a wholly-owned Canadian subsidiary of the US Steel Corporation, the biggest steel company in the US.

*The Hindu*, September 2

The Civil Supplies and Co-operation Ministry has convened a meeting of representatives of industry and trade on September 3 to consider measures for ensuring adequate supply of essential commodities like textiles, cereals, sugar and vanaspati to consumers during the coming festival season.

*Business Standard*, August 29

Groundnut oil has become the most sought-after commodity in Greater Bombay with consumers running from pillar to post to meet their minimum requirements.

*The Economic Times*, August 26

Expressing concern over the rise in prices of 'levy-free' sugar, Mr Jagjivan Ram said today he was distressed by the fact that an organised industry could not subject itself to voluntary discipline.

*The Statesman*, August 27

The West Bengal Congress president, Mr Arun Moitra, and one of the general secretaries, Mr Saugata Roy, left Calcutta for Delhi on Tuesday ... Asked whether there was any possibility of reorganisation of state Congress, Mr Moitra said: "Not that we know of. If the Central leadership feels that it is necessary, it can make changes".

*The Statesman*, September 1

An emergency meeting of the Orissa Congress Legislature Party held here [Bhubaneswar] tonight condemned "the attempt being made by some persons outside the party to create confusion in the CLP as also the Congress Party".

*The Statesman*, September 2

The Bill to extend the life of the Kerala Assembly by six months was welcomed by a Congressman, given qualified support by a CPI member and opposed by the CPI(M) spokesman during the inconclusive debate on the measure in the Lok Sabha today.

*The Statesman*, August 31

Two senior Congress leaders from Jammu and Kashmir today deplored the defection to the National Conference yesterday by some members of the state assembly who had been elected on the Congress ticket and who had some time back formed a dissident group in the state legislature.

*The Times of India*, August 28

The provision for anticipatory bail is sought to be scrapped through a Bill to amend the Code of Criminal Procedure now before the Rajya Sabha. The provision, which was introduced in 1973, has not been found to have achieved the purpose it was intended to.

*The Hindu*, August 26

The Centre has advised the states and the Union territories to permit interviews of MISA detenus with the members of the family and near relatives once a week, unless otherwise provided by them in the rules.

*The Times of India*, September 1

The Tamil Nadu police would break new grounds in crime prevention and detection with the introduction of the microwave police communication channels early next year and the hooking up of the police computer centre with all district headquarters.

*Patriot*, August 28

Officers and men of both the Calcutta Police and the West Bengal Police recently underwent a week's orientation on the use of computers at the Calcutta Police headquarters at Lalbazar.

*Amrita Bazar Patrika*, September 1

Prime Minister Indira Gandhi declared in the Lok Sabha today that the government policy was not to use

compulsion in the family planning programme.

*The Economic Times*, September 2

The Uttar Pradesh government has made sterilisation compulsory for employees of recognised educational institutions and has made motivation for sterilisation as part of their duties under a new regulation ... The order has been enforced throughout the state with effect from 14 August.

*Patriot*, August 28

The abortion law has been so liberalised that a girl or woman can get aborted for the asking.

*Patriot*, September 2

One person of Manikpur police circle [in Pratapgarh district, UP] has been arrested under MISA for making propaganda against family planning.

*The Pioneer*, August 26

There have been 18,664 reported malaria cases in the city [Delhi] during the first half of the year ... That means it has just a little more than doubled since last year.

*Hindustan Times*, August 20

Forty-six cases with preliminary signs of leprosy were detected during checks conducted among 17,204 students and teachers of 52 schools in [Jalgaon] district.

*The Times of India*, August 23

The growing incidence of cerebral malaria in the area [the north-east] is indeed alarming. More than 100,000 cases have been reported so far this year in Assam alone.

*The Times of India*, August 27

CPI leader Bhupesh Gupta has contested Prime Minister Indira Gandhi's recent statement in Sri Lanka that there is no pre-censorship in India. ... In this context, he referred to a secret circular issued by the Andhra Pradesh government's director of information on 16 August 1976. He had an authentic copy with him, he said, which purported to read: "Please note that news and comments, if any, of assault on weaker sections by the other sections of the community and landlords are subject to pre-censorship". ... Dealing with the functioning of Samachar, the only news agency in the country, Mr Gupta charged that it was "being run firstly by open censorship and by secret telephones".

*Patriot*, August 27

Eighteen houses belonging to Harijans, in Bharoli village in Guna district of Madhya Pradesh were set on fire in April, the Madhya Pradesh vidhan sabha was informed on Monday.

*The Times of India*, August 31

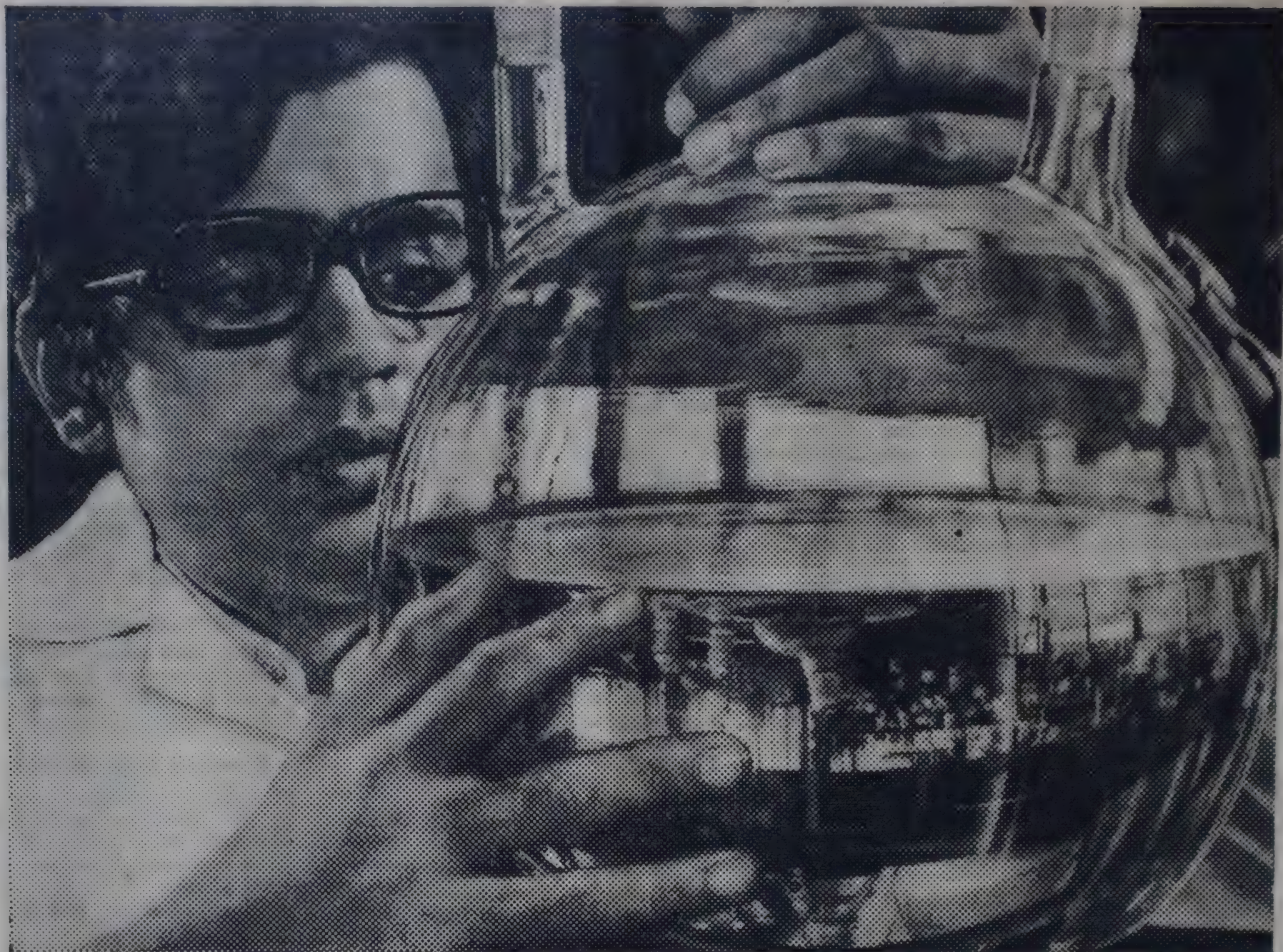
Collectors and district magistrates have started identifying the bonded labour to get them "emancipated". Mr K V Raghunatha Reddy, Union labour minister, told members of the consultative committee attached to his ministry.

*The Statesman*, August 30

About 189,000 hectares of land had already been distributed among the landless poor [in Orissa]. About 170,000 hectares of redistributed land was government property and the rest



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mopped up from big landlords.

*The Times of India*, August 22

Tamil Nadu government officials yesterday took charge of a 20-square mile tribal block in the Kalrayan hills that had been the private preserve of three jagirdars and set up the nucleus for the first revenue, police and administrative machinery in the area.

*The Times of India*, August 26

The salary and allowances of members of the Council of Ministers in Madhya Pradesh will be tax free with retrospective effect from April 1974, according to a state government decision.

*Hindustan Times*, September 1

About 2,500 teachers of 104 colleges in Bihar are going without their salaries for seven to 16 months because the state government has not released Rs 1.23 crores of last year's grants. The current year's grant is also held up.

*Patriot*, August 25

Mr L. Dayal of the IAS took over on Thursday as the Principal Information Officer of the Government of India. ...

This is the first time since Independence that an IAS officer has been appointed as PIO.

*Patriot*, August 27

India's national news agency, Samachar, will soon expand its international coverage by posting correspondents in 20 countries, the consultative committee of the members of parliament attached to the ministry of information and broadcasting was informed today.

*The Times of India*, August 28

India and the Soviet Union signed here [Moscow] today a protocol extending co-operation in science and technology to such areas as laser, cybernetics and forestry, reports Samachar.

*The Statesman*, August 21

From May 15 next year, two Indian ships and four Soviet vessels equipped with meteorological and oceanographic instruments will conduct a 90-day study of upper atmosphere and oceanic conditions in eastern Arabian Sea, northern Bay of Bengal and the equatorial region.

*Hindustan Times*, August 25

than competing soaps. Simultaneously, a long-term plan of action has been initiated towards streamlining the organisation and increasing productivity. Tata also discloses that last year's setback was aggravated by "serious and unexplained failures" in the technical field where two of the factories released a substantial quantity of sub-standard products, which had to be withdrawn from the market. Tata is, however, confident about the future of the company and its ability to face ups and downs in the industry.

RAYMOND WOOLLEN has undertaken a third modernisation programme for its woollen mills division involving installation of a further 12 new Sulzer weaving machines and other imported equipment for recombining, weaving preparatory and dyeing and finishing departments, besides expansion of the worsted spinning capacity by an additional 4,800 worsted spindles. This will involve an estimated total cost of Rs 2.30 crores, of which about Rs 1.12 crores is to be financed by loans in foreign currencies from ICICI and the balance will be financed out of the company's internally generated funds. The company has also received clearance for import of balancing equipment to achieve its recognised combing capacity of 2.7 million pounds in the wool combing division, for which it has applied to ICICI for additional foreign currency loans equivalent to about Rs 32 lakhs. In the engineers' files division, the company has undertaken modernisation and replacement of file cutting machines and other machinery to be purchased indigenously at a total cost of Rs 47 lakhs, which will be financed by deferred credit arrangements under the IDBI scheme. The company was able to increase its exports last year from Rs 4.18 crores to Rs 4.41 crores. The joint venture company in Indonesia 'PT Jaykay Files Indonesia', in which Raymond has a 30 per cent equity interest, has established its project in Surabaya for manufacture of engineer's files and rasps. Regular production for sale in the Indonesian market is to commence shortly. The company's financial results have been good, with higher sales at increased margins, although it had to cope with power shortage and all round escalation in costs and readjustment of excise levies which increased the aggregate incidence of excise duties. Equity dividend is maintained at 12 per cent.

## COMPANIES

### Faulty Product-Mix

Hansavivek

TATA OIL's results for the year ended March 1976 are disappointing. While net sales have declined by about 12 per cent from the previous year's level, gross profit has dropped by 39 per cent. The picture, in fact, would have been more dismal, but for the addition of Rs 1.17 crores written back from the gratuity provision made in the previous two years. Besides, the company received a royalty of Rs 74 lakhs from Unitata, the joint venture set up in Malaysia. The only redeeming feature from the shareholders' point of view is that dividend is maintained at 16 per cent. The reduced sales and contraction of margins are attributed mainly to the economic recession. The company's performance on the domestic front has been far from satisfactory, particularly in comparison with the improved results achieved by its main competitor, Hindustan Lever, operating under more or less the same constraints. J R D Tata, chairman, admits that the management's response to the transformation in the marketplace, brought about by the government's measures to curb inflation, was not as prompt and vigorous as it should have been and the company

suffered a setback. These conditions, moreover, brought to the surface the weaknesses in the company's product-mix. Apart from the preponderance of laundry soaps in the total turnover, production of these soaps has not been diversified, resulting in a high dependence on bar soap sales. Sales of bar soap, which last year represented in value nearly 60 per cent of the company's total soap sales, are particularly vulnerable to recessionary trends in times of abundant supplies and low cost of oils, favourable to the cottage and small-scale soap producers. Over the years, the company has substantially increased its output and sales of toilet soaps and detergents. But the earlier shift from soap to detergents has been reversed because of the five-fold increase in petroleum prices which raised detergent costs; moreover, the company achieved a breakthrough in the use of non-edible oils for soap-making. In order to penetrate the market for more advanced and diversified laundry soaps, the company has already diverted a part of the laundry soap capacity to production of new products which are claimed to be superior in quality and lower in price



**INDIAN DYESTUFF INDUSTRIES** has abandoned the phthalic anhydride project, for which it had obtained a 'letter of intent'. The directors say that there has been considerable delay in its clearance and that in the meanwhile the capital requirement has increased substantially. Besides, with the commissioning of further capacities in the country, the supply position of the chemical has since eased. The project is now no longer considered economically viable. The company is now concentrating on expansion in dyes and pigments. Its proposal to expand annual capacity of vat dyes, from 625 tonnes to 825 tonnes, has been approved by government and an industrial licence has been issued. It has also obtained a 'letter of intent' for expansion of capacity of reactive dyes, from 180 tonnes to 600 tonnes per annum. The company is also going ahead with the implementation of the industrial licence for annual manufacture of 500 tonnes of pigments. In order to raise part of the finance required for these projects, the company intends to raise additional finance of Rs 3 crores by issuing 'rights' equity shares of Rs 100 each at a premium of Rs 100 per share on a one-for-three basis. Meanwhile, as a result of re-

search and development efforts, it has developed a wide range of dyes and dye intermediates and other allied chemicals. IDI has produced very good results for 1975-76, with significant increases in sales and profits as well as margins. Dividend is maintained at 16 per cent, on the capital enlarged by a bonus issue, and finds a better cover than in the previous year. The company's export performance of Rs 4.60 crores, although slightly lower compared to that of 1974-75, is considered satisfactory in view of the severe recessionary trend in the world markets in the field of dyestuffs and chemicals. The company has now established itself as one of the leading exporter-manufacturers.

**ZENITH STEEL PIPES** has made very little progress in implementation of its diversification project for the manufacture of calcium carbide, for which it was issued a 'letter of intent'. The directors complain that certain indications in respect of power rates, interest-free loans, etc., which were given to them by the authorities at the time of submitting the application for industrial licence, have not materialised. The company is, therefore,

evaluating alternative sites, and proposes to make suitable application to the Central government for a change of location. Meanwhile, it is taking steps to manufacture pipes of large sizes. It has been allowed to make pipes upto 10" diameter within the overall licensed capacity. The company's 1975-76 results have been very poor, with considerably lower sales and reduced margins. Dividend, however, has been reduced only by a small fraction and is just covered by earnings. Exports suffered owing to adverse conditions in the international market. The rolls and shears division has difficulties in getting the necessary raw material. Moreover, import duty on tool steels has been stepped up, from 35 per cent to 75 per cent, from mid-March last. The company is, therefore, trying to procure these steels from indigenous sources. Production of special steels division was affected by power shortage. The division is concentrating on manufacture of low alloy steels, which are mainly used by the automobile industry and which at present face a recession. Production of pipes, which was 15 per cent lower last year compared to the previous year, is expected to be better in the current year.

## The Week's Companies

(Rs in Lakhs)

	Tata Oil		Raymond Woollen		IDI		Zenith Steel	
	Latest Year 31-3-76	Last Year 31-3-75	Latest Year 31-12-75	Last Year 31-12-74	Latest Year 31-3-76	Last Year 31-3-75	Latest Year 30-4-76	Last Year 30-4-75
Paid-up capital	506	506	176	176	487	337	252	252
Reserves	572	503	342	285	353	413	303	293
Borrowings	1768	1844	538	566	847	746	487	290
of which Term borrowings	200	200	175	166	143	145	6	84
Gross fixed assets	1707	1527	1201	1183	1672	1639	536	511
Net fixed assets	758	675	685	707	799	830	380	374
Investments	139	139	63	60	6	—	—	—
Current liabilities	1591	1522	452	432	926	701	357	532
Current assets	3540	3562	760	693	1809	1366	1019	994
Stocks	2323	2579	362	350	935	780	587	683
Book debts	1079	669	358	324	856	562	429	294
Net sales	6198	7080	2260	1864	2784	1940	1954	2622
Other income	466	405	177	153	211	131	18	5
Raw material costs	4290	5132	1090	923	1582	1100	1253	1625
Wages	693	680	367	355	222	202	125	129
Interest	265	214	93	76	142	119	57	56
Gross profit (+)/loss(—)	384	629	193	124	479	263	79	295
Depreciation provision	105	102	66	65	84	84	25	23
Tax provision	136	348	65	6	262	93	23	156
Net profit (+)/loss(—)	143	179	62	53	133	86	31	116
Development rebate provision	—	4	—	6	—	3	—	26
Transfer to reserves	67	99	42	27	58	32	—	58
Dividend								
Amount	P 5 E 71	5 71	P 2 E 18	2 18	P 3 E 72	3 48	P — E 31	— 32
Rate (per cent)	P 4.50 & 9.30 E 16	4.50 & 9.30 16	P 6.50 E 12	6.50 12	P 8.58 E 16	8.58 16	P — E 12.50	— 12.70
Cover (times)	1.94	2.40	3.33	2.50	1.81	1.65	1.00	2.81
Ratios (per cent)								
Gross profit/sales	6.19	8.88	8.54	6.65	17.20	13.56	3.98	11.25
Net profit/capital employed	5.02	6.21	5.87	5.16	7.88	5.57	2.97	13.90
Inventories/sales	37.43	36.42	10.60	18.77	33.58	40.52	30.04	26.04
Wages/sales	11.18	9.60	10.62	19.04	7.97	10.41	6.39	4.92



NEW DELHI

## Food Surplus for Export!

B M

THE brief spell of anxiety which was felt in government circles in July has given way to robust optimism with the turn for the better in weather conditions. The stopping of further purchases of foodgrains abroad and another look at the foodgrains production target for the Fifth Plan which has been proposed by the Food and Agriculture Ministry show how far and to what extent the behaviour of the monsoons influences the mood and the outlook of policy-makers.

The Food and Agriculture Minister, Jagjivan Ram, was unusually cheerful, relaxed and confident when he met economic journalists for an informal discussion last week. He used the occasion to predict that India should emerge as an exporter of foodgrains at the close of the Fifth Plan period two years hence. He disclosed that the Planning Commission had been advised by him to review the foodgrains production target for the Plan with a view to its upward revision. The original Plan target of 140 million tonnes is, of course, treated as not worth talking about. But the revised target of 124 million tonnes, which was thought to be realistic, is now proposed to be revised upwards, by exactly how much Jagjivan Ram did not say. But a target of 128 million tonnes is hinted at as quite feasible considering the achievement of 119 million tonnes during the current year.

The game of target fixing, however, is a far too familiar exercise to impress many, especially in respect of agricultural production. The fluctuations from year to year are wild and frequent. Rains are admittedly a decisive factor still. Even according to Jagjivan Ram, the level of 119 million tonnes of production in the current year has been attained because of better than average monsoons. But such ideal weather conditions cannot be a reliable basis either for planning or for projecting future performance. If the favourable monsoon factor fails to materialise, production will be significantly below the current year's level. But Jagjivan Ram contends that a pro-

duction of 105 million tonnes is the minimum that can be achieved even in conditions of bad monsoons. This too is an impressive advance considering the fact that only two years ago, when drought conditions prevailed over large parts of the country, production had fallen to only 97 million tonnes. Ram's assumption is that with the addition of another five million hectares to perennial irrigation in the next two years, the minimum level of production that may be expected even in adverse weather conditions would be about 108 to 110 million tonnes. Since a buffer stock of 17 million tonnes has been created, fluctuations in year to year production above the minimum level, can be taken care of without any serious disruption in food availability and prices. It is possible, therefore, to consider and even plan for export of foodgrains as a normal feature after a couple of years.

The role of a foodgrains buffer stock as an insurance against adverse weather conditions resulting in a precipitate fall in production is well recognised. The question to be decided is what should be the size of the buffer for this purpose. This matter is under examination by an expert committee. The trend of thinking in the government appears to be that a buffer of 17 million tonnes would be adequate and attention should be paid to creating storage capacity of this level on a permanent basis. Jagjivan Ram, however, wants to go beyond this in examining the role of the buffer and is raising the question of exportable surpluses of foodgrains in the future in that context.

The current year's experience in foodgrains procurement is of some relevance in such an examination. Except for brief disturbances, the open market prices of foodgrains have been generally at par with, if not lower than, the official procurement prices. Procurement prices have worked, therefore, as support prices on the whole and the marketable surpluses in agriculture have tended to be freely available for open market purchases by the public procurement agencies.

The total procurement of foodgrains in the current agricultural year has touched the substantial figure of 13 million tonnes — 6.5 from kharif and 6.4 from rabi. On this basis procurement is expected to be even better next year in the event of production remaining at the current year's level and more so in the event of some increase in production. The monsoon this year, after giving some uneasy moments, has turned out to be good and the prospects for production are therefore rated high.

In contrast to the comfortable position with regard to procurement, the pressure on the public distribution system and hence offtake of foodgrains from the stocks is proportionately much less. The offtake currently is hardly 6 lakhs tonnes a month and the position is not likely to change very much in the next few months. This means that with procurement remaining at the current year's level or even improving, the buffer stock with the government should be expected to be very much more than 17 million tonnes next year. It will touch 17 million tonnes plus an operational stock of about five to six million tonnes.

The government and the Food Ministry, in particular, is happy that the commitment to public distribution is shrinking. There is no intention to widen its coverage or even to stabilise public distribution except to the extent there is pressing demand for it. If large sections of poor people, especially in the countryside, find it impossible to get foodgrains from either the open market or the public distribution system because of lack of purchasing power, so much the worse for them. The government cannot do anything much for them. So far as the Food and Agriculture Ministry is concerned its responsibility ends with those who can make purchases at the present level of prices of foodgrains. Generation of purchasing power among the vulnerable sections is something which is not taken to fall within the ambit of its responsibility and must be left to the broader plane of development and planning policies and expectations. But the Food and Agriculture Ministry is very certain in its approach that its prime responsibility is to ensure that the producer secures the right remunerative price for what part of his produce he wants to sell. The



machinery for procurement of all grain offered at the fixed procurement price is, therefore, proposed to be kept in trim and in full working order at all times. Jagjivan Ram has made it clear that he would take all grain offered at the procurement price even if the government stocks swell to 25 million tonnes or beyond. The problem will be one of finance and storage capacity. That can be solved by exporting foodgrains to the extent there is a surplus with the government over the minimum assessed buffer stock requirement for domestic purposes.

A new quality has thus emerged in the conception and framing of foodgrains production, pricing, procurement and public distribution policies. This flows logically from the operation of the new agricultural strategy and falls neatly into the overall economic policy and approach. The question of domestic consumption is tackled strictly in terms of market cri-

teria and effective demand. The public distribution system must function on a viable basis for viable sections who have purchasing power. The producer of the marketed surplus must be assured of a remunerative price and his surplus secured on that basis for meeting effective demand in the domestic market and for export to the extent it is feasible and necessary. The principles governing commercial agriculture which is being promoted with so much diligence for the last ten years under the banner of the new agriculture strategy are at last beginning to assert themselves. The approach is all of a piece with that towards other sectors of economic activity. If steel, coal, cement and similar other industrial goods can find profitable export outlets when effective demand in the domestic market is not enough to absorb the current level of production, there is no reason why foodgrains cannot emerge as yet another export commodity on a similar basis!

## CALCUTTA

# Life in the Slums

Kalyan Chaudhuri

A VAST stretch of dock area in south-west Calcutta remained under chest-deep water for about 48 hours following a heavy shower on August 5. About one lakh slum-dwellers in this part of the city were severely affected by the rain and waterlogging. Hundreds of bustee-dwellers had to be evacuated by local people from inundated areas to safer places in school and club buildings. About 100 rain-soaked bustee huts collapsed. The number of country boats, which were the only means of communication in the waterlogged areas, was hopelessly inadequate causing delay in the evacuation operation.

A part of the Circular Garden Reach area remained under water for seven days ever after the rain had stopped on August 6. Though the rain-water had receded from many places, lanes and bylanes were still slushy and surface drains choked with silt, garbage and carcasses. The air was still filled with foul smell. In the absence of extensive preventive measures, cases of cholera, gastro-enteritis and influenza were reported from the affected slums.

The worst affected south-west zone of Calcutta covering Kidderpore, Ekbalpur, Watgunj and Garden Reach is one of the largest slum complexes in India, if not in the world. The people living in the slums of this area belong to

various communities like Bihari Muslims, Bengalee refugees from East Pakistan (now Bangladesh) and a few Chinese and Anglo-Indians.

Today, in all but three of the 100 wards of Calcutta city, there are bustees, accounting for a third of the city's population of 3.1 million. In the metropolitan district itself, out of the total population of 8.3 million, more than a quarter live in slums. These are the official figures. There are many more 'unrecognised' slum clusters or individual huts. How does the one-third of the city population in slums live through every monsoon? Monsoon to them is three months of leaking roofs and damp mud floors. It means nights spent standing in waist-deep water, clutching babies and rags in a bid to keep them dry. It means even more diseases.

Most of the slums in Greater Calcutta are situated in low-lying areas in the Cossipore-Paikpara-Belgachia, Kidderpore-Watgunj-Tollygunj, Tangra-Topsia-Beliaghata, Howrah and Baranagar-Kamarhati-Rishra-Champdani zones. Depending on the perspective of the observer, they have been regarded either as a hell on earth or as evidence of people's ability to survive at incredibly low levels of material sustenance.

Calcutta's slums are not squatter settlements. They are not a motley assem-

bly of shacks and mud huts set up on territory seized by migrants. The bustees of Calcutta are long established tenancy settlements, nearly as old as the city itself. Commencing with the development of the Calcutta Port and the rise of the jute and engineering industries over 100 years ago, bustees came up on poorly developed lands adjoining factories and other employment centres. The huts, usually mud walls and tile roofs in the shape of a quadrangle partitioned into many rooms, were built by middlemen (Thikka tenants) who had taken the lands on lease from the landowners. The bustee dwellers themselves were the tenants of the middlemen, who owned the huts. Unfortunately, the industry that flourished in Calcutta and its management were of 19th century vintage, unaware or unconcerned about worker housing or social welfare. Thus as industry grew so did the bustee.

At Circular Garden Reach Street, near Kidderpore tram depot, exists one of the biggest slums in Calcutta covering an area of about half a square mile. The size of families ranges from single persons to two adults and eight children. The oldest tenant has been in the slum for 20 years. Family incomes average about Rs 35 per week. The highest income is Rs 75 per week in one family where the husband and wife are both working. The lowest is Rs 50 per month, a death benefit for a woman from a Christian Mission. The working men and women are employed as porters, dressmakers, maid servants, labourers, mechanics, power press operators, laundry workers, machinists, hospital workers and construction workers.

Nilmoni Das, a 52-year-old carpenter, came to Calcutta in 1951 from East Pakistan (now Bangladesh). He has no fixed income. He has to move about every day in different busy localities of the city in search of work on daily basis. Nilmoni is the father of seven children. His eldest child is a 27-year-old son, Niranjana, who quit school to take a job as a grocery clerk and moved next door to his parents after marriage. All the other eight members of Nilmoni's family, including two grown-up girls, live in a one-room bustee hut. Nilmoni has been frantically trying to leave the bustee. "I don't like this area because there are too many drunks... There is only one latrine for 15 families. The place is too hot in the summer. In the monsoon we have to spend many sleepless nights standing in waist-deep water. The roof leaks. Everywhere there are cockroaches, rats and garbage. My youngest daughter is now suffering from high fever because of



rat-bite ...".

With people pouring endlessly into Calcutta from village areas in search of job and food, hundreds of new huts sprout each day in different localities, as if from nowhere, put together ingeniously with materials sifted from the city's garbage-heaps.

The Calcutta Improvement Trust at one time adopted a "slum clearance" scheme for building single-room tenements for slum-dwellers after demolishing the existing slums in the city. But it was not an easy job. After all, slums reflect not only the lack of better housing but the entire economic condition of the slum-dwellers and unless this condition is improved schemes which seek to physically transplant the slum-dwellers from the slums to brick-and-mortar tenements are unlikely to succeed.

Until the 1950s practically no effort was made to improve living conditions in the bustees. The Calcutta Corporation made certain efforts to improve the bustees in the late 1940s, but due to various legal difficulties these attempts could not succeed. The crux of the bustee problem in Calcutta seems to be land and its ownership. Since for several years to come resources may not be found for slum clearance and re-housing of slum-dwellers, environmental improvement has to be regarded as the first essential step. However, it would be easier to justify investment in such improvements if the bustee land were owned by the government.

The Calcutta Metropolitan Planning Organisation (CMPO) estimated sometime in 1970 that in Calcutta and Howrah about 2,000 acres were locked up in bustees. An equal area was involved in the rest of the metropolis. To acquire the total bustee land an amount of Rs 50 crores was estimated to be required; finding this order of resources was considered "not an unfeasible proposition". But the scheme was abandoned in course of time.

As elsewhere in the country, public policy in Calcutta towards slums has evolved over the years. In the early 1950s the approach was still the classical one of removing the slums and re-housing the dwellers in multi-storied flats at subsidised rents. Realising that the capital cost of this approach was very high, that rents were virtually beyond the reach of the slum-dwellers and that there occurred serious dislocation of employment opportunities, planners in Calcutta were the first to advocate a programme of slum improvement in preference to slum clearance. Schemes for environmental improvement were drawn up earlier, but in 1970 the Cal-

cutta Metropolitan Development Authority (CMDA) took up a programme for the improvement of the city's slums.

The CMDA claims that till now over 1,500 slums located in the core of the metropolitan district in and around Calcutta and Howrah have been brought under the improvement programme. According to the records, Rs 120 million have been invested in improved supply of potable water through new public taps, replacement of all "service" latrines by sanitary latrines and connecting them to the city's sewers or septic tanks, building of paved pathways and installation of street lights and filling up of ditches and ponds to create open spaces in the bustees.

But the taps are nowhere to be seen. Most of the public water taps have been removed, damaged or are unworkable. The water stands are filthy. When the taps do work, a thin stream runs

for an hour or two, but that is all. Hardly anything has been done in regard to the replacement of service latrines by sanitary latrines. Service latrines in the bustees around Calcutta dock has no water or sewage connections most time. Wherever there is any sewage system it is connected with water tanks. Most of the roads are half constructed, turning them into open gutters; the construction is unscientific and with inferior materials; and even a brief downpour sends water and human excreta from the gutters gushing into the adjoining huts.

This is the picture one found in slums in Kidderpore, Watgunj, Ekbalpur and Garden Reach areas during the period of deluge and waterlogging early this month. Two or three times in every monsoon, flood waters inundate the slum-town in south-west Calcutta. On the last occasion, most of the huts were in waist-deep water for three days on end, from August 5.

## PUBLIC HEALTH

# Multi-Purpose Health Workers: Receding into the Dim Future?

(From a Special Correspondent)

IN 1953; in the course of a heated discussion on the advisability of terminating the licentiate grade of doctors, opponents of this move were offered a solution to their objection that this would materially worsen the amount of medical care available in rural areas. This was to recommend the training of Medical and Health Auxiliaries, who would be specially trained to carry out a wide range of preventive and curative services, with especial emphasis on water supply and sanitation, the control of malaria, and general preventive health care. This seemed like a good idea, and the Central Council of Health passed a resolution to that effect: more than that, the Health Ministry, in conjunction with the Planning Commission, produced a scheme to implement it, as part of the Second Plan. However, there were objections: several state governments claimed it would increase quackery if these new auxiliaries were to have any curative training, so that was cut out; then several states said that they already had training schemes for different kinds of health workers and they were not convinced of the value of a new kind — and anyway, what was to be done with them when there were enough doctors in the rural areas? Would they be upgraded to doctors themselves?

The upshot was that the scheme was allowed to fade away, and instead there was the emphasis on exhorting doctors to serve in rural areas, which has served since then instead of a policy for getting medical and health care to the villages of India. In addition, by the late 1950s, public health theory had swung round to the idea of separate cadres of health workers for the separate campaigns — against malaria and smallpox in particular — who were trained for specific purposes and had little to do with health services outside their own sphere. Later on there was a similar expansion of workers in family planning, who were soon given maternal and child health functions to fulfil as well.

By the mid-1960s it was increasingly realised that there were great inefficiencies in running parallel programmes: furthermore, it was difficult to know what to do with the workers from the cadres which had achieved their goals — as people believed that the malaria eradication workers were about to do. The undercurrent in favour of 'integration' — always a fashionable term to use in discussion — became stronger with the Jungalwalla Report of 1967, but it only became a flood with the Report of the Kartar Singh Committee in 1973. That Report was heavily in-



influenced by some action research carried out by the National Institute for Health Administration and Education (NIHAE) in Rohtak over the previous couple of years, which had demonstrated the gains to be achieved if uni-purpose workers could be turned into multi-purpose ones.

All this was in time for the Draft Fifth Plan, which said that "The Minimum Needs Programme, along with the training of multi-purpose health auxiliary and a more vigorous pursuit of communicable diseases eradication/control is the core of the health care programme". Of course, almost as soon as the Draft was published it was negated by a series of factors, not least being the rapid rise in prices, and the social services sector was pruned heavily to allow core sectors like steel and heavy industry to go ahead unaffected. As a result, in real terms the health Plan in 1974-75 was down to around the 1969-70 level, and only in the current year has the proposed outlay climbed back above the 1972-73 figure — always assuming the price-line can be held. The pattern of expenditure in the health sector has also been affected by the rising tide of malaria, and the National Malaria Programme, no longer regarded as Eradication but only as Control, has reached its Plan allocation after only three years of the Plan period. The combined effect of these problems has meant that the sacrosanct character of the Minimum Needs Programme has gone by the board, as the figures for completion of rural hospitals show only too clearly: but the effects on other programmes have been less easy to discern. One step towards additional knowledge is provided by NIHAE's evaluation of the introduction of the Multi-Purpose Health Worker (MPHW) training and implementation schemes: not surprisingly, the picture it presents is rather depressing.

The study covers only three states (Andhra, UP and Maharashtra) but since that means about one-third of the national population, the results are of considerable significance. Since it is a preliminary report, and only covers the initial 18-21 months of the scheme, too much should not be made of what the report uncovers, but a fairly clear general outline does emerge. There were four stages to the implementation plan. Firstly, staff from the State Training Centres for family planning workers were to be trained at national institutes. Secondly, the State Training Centres were to train the senior staff at the block level (doctors, Block Extension Educators and Health Supervisors). Thirdly, these block-level

staff were to train the various categories of uni-purpose workers (Sanitary Inspectors, Auxiliary Nurse Midwives and so on) at Primary Health Centres or at their sub-centres and finally, the work of these officials was to be reorganised so that they actually used this training.

What is clear so far is that all the states are good at sending their training staff to be trained, and at sending the supervisory staff through training courses at the state Centres. They are not so good at making sure that the training they receive is of any use. To begin with, the State Training Centres were to have attached to them a Primary Health Centre and its associated sub-centres, where the new pattern would be implemented, so that supervisory staff trained by them would be able to get some practical experience. In none of the states have any of the training courses actually included this practical experience, for reasons ranging from the crazy bureaucratic (as a result of which the PHCs allocated were many miles from the Training Centres) to shortages of funds for transport to get to these centres. The second problem is making sure that the training is not wasted. The NIHAE report abounds in examples of Training Centre principals, trained at great expense, who retire from service within six months, or get transferred after the same period. Then there are PHC doctors, who are trained only in time for them to be moved out of the experimental districts. Finally, in each state, one or more categories of Training Centre staff were not sent for re-training, even though they might play an important role in the work of the training Centre.

However, the main source of wastage is that even when the supervisory staff at the PHC level have trained people actually to be MPHWs, the state organisation has not yet managed to sort out basic bureaucratic details like the pay-scales of these workers, what kits they are to carry with them and how they are to be replenished, nor how the state is to pay for all this. As a result, the situation in about June 1976 was that Andhra was still going ahead with the various training programmes, even though the Training Centres were only about 40 per cent staffed and no area within the state was actually working using staff on multi-purpose duties (except for one sub-centre near Hyderabad). In UP they suspended the training at PHC level in June 1975 because they realised that there was little point unless the retrained staff could be used

according to their new training, and there was no likelihood that this could be arranged — but they are still training supervisory staff at the State Training Centres, and some of these Centres have almost reached the point where their Field Practice Demonstration Areas are working under the new pattern. In Maharashtra a more intelligent decision has been taken. Here almost all training has stopped, but the Training Centres are heavily involved in implementing the new scheme in the Field Practice Demonstration Areas attached to them, and these are being watched and evaluated by the state government before any further decisions are made.

The major weaknesses of the whole scheme can be traced to a lack of commitment on the part of the states to make the experiment a success, which also suggests the low priority that rural work, and paramedical workers, have in most states. Not only are funds for the training programmes scarce but the administrative arrangements to ensure its success have not been made, so that, for example, the Field Practice Demonstration Areas are under the full control of the Training Centres only in Maharashtra and in a few cases in UP. The staff at the Training Centres are not well motivated, partly because the continuance of uni-purpose training schemes in the state makes them unconvinced that there is a future in MPHWs. The delay in sorting out pay-scales has meant not only that where the scheme is in operation there is not equal pay for equal work, but in a few cases workers are actually worse off as a result of the change. And of course, it is clear that when doctors are brought into the picture, they are there only under duress. Not only is the job of Principal regarded as a deadend and a punishment, the doctors who come for training only listen when they are trained by other doctors, and are in any case usually doing their best to be transferred out of PHC work as fast as possible. Finally the current priority being given to Family Planning work overrides the MPHW scheme. Not only is this seen as an adequate reason for refusing to send staff for training, or to stop training prematurely, but the MPHWs who are actually in position are being loaded down with targets in family planning to achieve, which bodes well neither for their relationships with their villages nor for disease prevention. When so many things are running against the success of MPHWs, what chance is there that it will come out right in the end?



## WEST GERMANY

## Eastern Policy and Elections

Ramesh Jaura

AS in 1971, the Eastern Policy of the socialist-liberal coalition government in West Germany threatens to become a hot electoral issue for the coming general elections on October 3. Even West Berlin which, at least since the signing of the four-power agreement and the transit treaties, had ceased to hit the headlines, shows signs of once again becoming an issue endangering detente in Europe which over a year ago appeared to have been achieved in Helsinki. This is indicated by a series of incidents on the borders between the two German states, climaxed by East Berlin's refusal to allow 14 of the 30 buses carrying West Germans to pass through the GDR territory to reach West Berlin. Passengers of the 14 buses had been mobilised by the youth-wing of the Christian Democratic Party (CDU) to demonstrate in West Berlin on the fifteenth anniversary of the erection of the Berlin Wall on August 13, 1961. The demonstration addressed by the CDU general secretary, Kurt Biedenkopf, took place at the Reichstag building — a few metres removed from the border — where pre-war German parliaments used to hold their sessions.

The refusal of GDR border posts to grant the CDU-youth wing supporters transit passage has caused the three Western allies — US, France and UK — to issue a statement expressing "concern" over "hindrance of free flow of traffic" between West Germany and West Berlin. But even though the Allied statement does not go as far as to declare the August 13 Incident as a "clear-cut violation of the transit treaties" and the four-power agreements, the West Berlin Mayor Schuetz, the CDU-CSU opposition as well as a large section of the West German mass media have not hesitated to do so. The moderately-worded statement of the Allies undoubtedly came as a surprise to those who intended making West Berlin again a crisis-point and make political capital out of the incident for electoral purposes in West Germany. But a cool look at the transit treaties reveals that in view of a chain of recent border incidents, the GDR might not have been unjustified in denying use of transit ways. It could with some justice, evoke Article 16 of the transit treaties to support its claim that there

were adequate grounds "for suspicion that the transit ways would be misused for provocations against the German Democratic Republic".

The number of such provocations has indeed been mounting since the last few months starting with the arrest of two West German border force personnel who were later released by GDR. Even though Bonn claimed that the border force personnel could not have voluntarily landed in GDR territory, at least one border guard admitted on East German TV, and later, on West German TV, that they had violated the frontier. Then came the clear-cut violation of the border by a Hamburg citizen, who was shot at by the GDR frontier posts, and later "well-treated in hospital", as he himself said on his release. The climax was reached with the shooting of an Italian lorry-driver, who as it turned out later, was a member of the Communist Party in his country. The lorry-driver was shot late at evening on GDR territory while he was returning by foot to the border post, apparently to pick up his driving licence which he had forgotten there, along a road otherwise closed to pedestrians.

The incident provided the West German politicians of all hues as well as the mass media to raise a storm of protest at the "inhumanity of the Communist system prevailing in the GDR" which did not even fight shy of shooting a communist. It also provided West German foreign minister Genscher another opportunity to renew his pledge to bring up the issue of indiscriminate shooting down of people by the GDR authorities, at the UN Human Rights Commission.

Perhaps nowhere else in the world are the borders of a sovereign state considered such an object of curiosity as they obviously are by stray West German citizens. Even the West German government does not seem to hinder violations, deliberate or otherwise, by its citizens. Recently when customs officers of the border-force were told by a West German citizen that he intended to create mischief on the frontier, he was allowed to go ahead with a warning that it could prove to be dangerous. Commenting editorially on this incident, the West Berlin daily, *Der Tagesspiegel* (August

15, 1976), which can by no stretch of imagination be described as pro-Communist, wrote: "This is unbelievable." On Bonn's attempt to explain away the incident by saying that all Germans have the freedom to move around as they like, the daily commented: "Just a warning of the sort is not enough. It is perhaps necessary to re-read the Basic Law (of the West German constitution) to determine whether this sort of freedom to move around where one likes is permitted by the constitution."

In this context, many West Germans have raised the question whether Bonn is not damaging its declared policy of detente and normalisation of relations with the GDR. Under the pretext of "freedom of movement", it is said, Bonn might be indirectly supporting violations of the borders by citizens who are playing into the hands of those interested in proving that the Eastern policy of the socialist-liberal coalition is in fact an act of surrender to the communists on the other side. As *Der Tagesspiegel* pointed out: "According to Article 9 of the treaty, no suspicion should be allowed to arise that the transit ways would be used for purposes which are not directly concerned with transit alone to and from Berlin (West)." The daily went on to appeal for having a cool-headed look at the recent events involving the two German states. "The more excited we allow ourselves to get, the more would our allies have the cause to think about the future direction of the Federal German policy." In this context, it cited a recent article in *The Times* (London) which doubted whether West Germany would continue to be a loyal member of the European Community and NATO. *The Times* even went as far as to suggest that the two German states might reunite after West Germany agreeing to pay the price demanded by Moscow, that is, its withdrawal from the European Community and the NATO.

Such a development undoubtedly belongs to the realm of the impossible in the foreseeable future. But many West Germans maintain that if in the October 3 elections CDU and CSU come to hold the reins of power, *The Times'* stipulations might not after all be far-fetched. But however one might look at such a theory, there are enough indications pointing to the possibility of the present Socialist-Liberal coalition losing majority or being returned to power with a reduced majority, and increasing internal tension in West Germany.



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## JAPAN

## Environmental Destruction

Peter B Clark

IN a world where GNP reigns supreme Japan has claimed to achieve an economic miracle. It rose out of feudalism to conquer most of the Pacific. Like a phoenix, it re-emerged from the ashes of Hiroshima and Nagasaki to become one of the world's great economic powers. Yet in Japan's golden decade — 1960s — it gained another fame as the most polluted country in the world. Of course, the US has the distinction of producing the greatest amount of pollution, but the intensity of pollution in Japan has shocked the world.

The "Minamata Disease" caused by mercury poisoning is a case in point. In the small town of Minamata, in southeast Kyushu Island, the Chisso Chemical Company was using mercury in its production of acetaldehyde and discharging into Minamata Bay untreated wastes, both liquid and, up to 1945, solid ones. In 1953 cats, who lived on fish from the bay (as did the people), began behaving strangely. "They walked with a strange, rolling gait, frequently stumbling over their own legs. Many suddenly went mad, running in circles and foaming at the mouth until they fell — or were thrown — into the sea and drowned.... Inexorably, the dancing disease spread to humans." (Norie Huddle and Michael Reich, "Island of Dreams", Autumn Press, Tokyo, 1975.) In the spring of 1956, several people came down with the disease. Despite efforts by physicians and researchers at Kumamoto University, it took years to establish the cause — the obstruction by Chisso preventing access to waste samples and information on their industrial process being at least partly responsible for the delay. By 1958 congenital cases of the disease were noted, and in 1959 tests showed high concentrations of mercury in the fish and in the dead patients. Still, was it Chisso's mercury?

In 1959, a special governmental committee arranged a very low cash settlement, about one-twentieth of the originally proposed amount, giving some compensation to a few of the victims, but without proving or disproving Chisso's responsibility. The settlement included a clause stating that "when the factory waste is found not to be at fault, the whole agreement shall be dissolved; if the factory

waste is shown to be responsible for the disease, the victims will not request any further compensation." ("Polluted Japan", Jishu Koza Citizens Movement 1972.) Thus a governmental body acted to protect the Chisso Company.

In the early sixties, various government bodies set up committees to investigate problems associated with the Minamata Case, but these were dissolved without publishing any reports. Minamata vanished from the public eye — until mercury poisoning broke out around the acetaldehyde plant of Showa Denko Company in Niigata Prefecture in the northern Honshu Island. Then the whole world became aware of the dangers of mercury poisoning, and Japanese fish products were banned in several countries. Signs of Minamata Disease from various factories were found in Sweden, Canada, Italy and other countries.

Court case followed court case. In March 1973 a case ended with the recognition of the victims' claims for compensation. Chisso switched to another method of producing acetaldehyde which does not use mercury. But the problem has not ended. Although nets have been placed to separate the contaminated areas from "clean" fishing grounds, nothing prevents fish from travelling in and out of the contaminated area through the channel made for boats to get from the harbour out to the fishing grounds. Sediment in the contaminated area still contains several hundred ppm (parts per million) of mercury compounds.

The legal system for recognising "official pollution victim" prevents thousands of sufferers from obtaining medical relief. By November 1975, there were 899 officially recognised victims living in Kumamoto and Kagoshima Prefectures in Kyushu Island, with over 3,000 who had filed for recognition. The Kumamoto Prefecture Recognition Deliberation Committee investigates only eighty cases per month. Medical authorities have estimated that there are at least 10,000 victims as yet undiscovered or with latent mercury poisoning.

While many sufferers have been denied recognition, those exhibiting only one or two of the Minamata symptoms

are often diagnosed as suffering from some other disease. The problem is that it is impossible to determine a specific set of symptoms which define Minamata Disease. The list of symptoms has lengthened over the years, and many are still unrecognised and some may remain undiscovered. Which symptoms are exhibited varies from case to case and over a period of time. Thus, the recognition by the official committee uses a set of rules more rigid and much stricter than medical science usually allows.

There are other cases of industrial pollution and food poisoning that have followed the same pattern as Minamata Disease — cadmium, arsenic, and PCB (poly-chlorinated biphenyls, commonly used as a heat exchange medium) poisoning; unsafe food additives, and drugs such as thalidomide. In all cases, the physical suffering of the victims has been compounded by social stigma and by the failure of industry and government — from the local to national level — to accept responsibility.

The most recent case broke out a year ago, when Nihon Chemical Company in Kamatsugawa, Tokyo, was found to be polluting the environment with hexavalent chromium. Between 1965 and 1970, the company dumped 80,000 tonnes of chrome slag on a 16,000 square metre area of land within the Edogawa Ward of Tokyo. Yellow runoff collected at the site was found to contain 110 ppm hexavalent chrome, or 2,200 times the environmental standard. Officially a total of 600,000 tonnes of chrome slag have been dumped in Tokyo, the surrounding area, and Tokyo Bay. It has been dumped on land used for company housing, apartments, schools, playgrounds, and children's parks.

People in the vicinity of the factory in Edogawa Ward have complained of bronchitis symptoms and numbness in their hands and feet. Some have died from lung cancer believed to be caused by chrome dust. At least 36 workers in the factory have also died from chrome dust-induced lung cancer, and there are over 100 cases of workers suffering from nasal septum perforation (the melting away of the wall separating the two nostrils), caused by chrome dust inhalation. And this is just the tip of the iceberg.

As far back as 1955, Japan's Agricultural and Commerce Ministry had recognised the dangers of chromium. In 1959 a medical study revealed 81 cases of nasal septum perforation at



the chemical plant, but national, city and ward officials ignored the results of the study. On May 10, 1973, the Tokyo Municipal Government received a report from Nihon Chemical documenting the dumping of chromium wastes in parts of Tokyo. Some time in this period government agencies, in what appears to be collusion with Nihon Chemical to conceal the pollution, approved a proposal to buy up the chrome-polluted land where the Komatsugawa plant is located. Nihon Chemical is using this \$ 40 million of taxpayers' money to construct a new plant with more modern technology in South Korea, where labour is cheap and pollution control laws are lax.

Caught in an embarrassing situation, the Tokyo Metropolitan Pollution Board (MPB) and the governor of Tokyo promised to take the necessary steps. One of the MPB proposals was to reduce the hexavalent chrome to trivalent chrome and use it in producing asphalt. Unfortunately, medical studies by the Metropolitan government have shown that trivalent chrome causes cancer more quickly than hexavalent chrome. The medical procedures for identifying victims, being based on urine analysis, cannot measure anything but short-term effects.

As more and more people became aware of environmental destruction in Japan, pressure forced the government to take steps; yet the recent chromium case casts some doubt on the ability of the government to control industry; the compensation cases makes one wonder whether social justice is being sacrificed in order to appease the victims and protect the industries.

Due to increasing government controls and especially due to the rising costs of land, materials and labour, Japanese industry is moving into Asia, Latin America, and Africa. This is a cause for concern among some groups in Japan, which have dedicated themselves to stopping the "export of pollution" along with the Japanese economic neo-imperialism.

Not all of Japan's problems can be exported; it is the fourth most densely populated country in the world, and most of its land area is rough mountains. Land use is a central issue, especially in the flat coastal areas. Japan is historically an agricultural and fishing society, and even though the country has become urbanised, the people have not forgotten their rural roots and rights.

Okinawa was returned to Japan in 1974 after 28 years of US military control. In Okinawa farmers and fishermen are powerful, and have the

support of the labour unions and of students in opposing the continuance of US military bases and growth of Japanese military installations, which presently cover over one-fourth of the arable land, on the island. There is opposition to the growth of petro-industries and light and heavy metal industries on concrete landfills extended from the shore or forming artificial islands. The central issue is the basic right of farmers to farm the land and of fishermen to fish in the waters without the obstruction of concrete runways and landfills. The basic problem is that the control of land development and the military is with the Liberal Democratic Party Government in Tokyo, which represents the industrial super-corporations. Similar issues and problems are faced by farmers and fishermen on the four main islands whose homes have been appropriated or bought out for the construction of nuclear power plants. Farmers and fishermen recognise the threat that nuclear power plants pose to their livelihoods. On the grounds of land and sea rights, they oppose the development of nuclear power.

The key to the land struggle lies in what happens in the town of Sanrizuka, Narita, 60 kilometres northeast of Tokyo on the Kanto Plain. Sanrizuka is the site for the New Tokyo International Airport (NTIA), designed to replace Haneda, which presently handles international flights. Although planning commenced over ten years ago, only one of the three runways is completed, and is not yet in operation. One of the unsolved problems is transportation to and from Tokyo. Another is the opposition of the Sanrizuka farmers to further construction and to the use of the present runway. They have built a 65 metre tower on their land at the end of the runway, making it unusable, and have sold shares in it all over Japan and even abroad.

There are two reasons for their opposition to the new airport. First, a new airport is necessary only because of the crowded airlines over Tokyo. But the crowding resulted from the US-Japan Security Treaty and the Status of Forces Agreement, which give the

US Military control over a number of the major airlines and, in addition, gives non-combatant flights/landing rights at "civilian" airports such as Haneda. Another reason is that development of the new airport is part of an industrial expansion scheme which would, before long, turn the Kanto Plain into an extension of the urban and industrial sprawl of the Tokyo Capital Region. The airport will attract real estate speculators, hotel builders and factories. For the farmers, the airport is the beginning of their end. If the airport is completed the future they see is loss of the land which they have coaxed into productivity and which has nurtured them and their families. They will become unskilled workers, lost in the crush of the city. The profits will go into the hands of the wealthy, and the peasants will become poorer.

The farmers of Sanrizuka, supported by students all over Japan, have opposed the construction of the airport from the start. The only way the one existing runway could have been built was through forcible removal of the farmers from their land in 1970 after a pitched battle. Now the government is planning to build a roadway through the paddy fields to bring in heavy equipment and demolish the tower. But before that, it must go through a legal process with all the owners of the tower, scattered throughout the world. Meanwhile, the runway has developed several cracks, and there is doubt over whether it will remain usable.

The land issue and the opposition shown in such examples of land development are part of a big change that is coming about in Japan, bringing into question the very nature of Japan's economic development. Environmental and anti-pollution groups in Japan are radically different from those in the US which are more or less comprised of affluent middle class intellectuals. In Japan, the poorest are being hit the hardest by pollution and environmental destruction. And the poor are challenging the rights of the corporate, government, and military interests to decide the future of the land, the people's lives, and the country.

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# The Foundations of Repression

Elisabeth Clairmonte

PERHAPS it requires a natural catastrophe of the scale of Guatemala's February 4th earthquake that wiped out 23,000 persons, injured 68,000, and rendered homeless 1,050,000 (out of a total population of around 6 million) to reflect once again on the nature of repressive power.

Who were the dead, the injured and the homeless? They were Indians and, in the words of the *New York Times*,<sup>1</sup> they died largely because they were poor. To seek the origins of their poverty is to study the processes of colonisation, and more specifically recent events since the 1950s.<sup>2</sup> The spectacle of death and desolation is grim; and traditional poverty has now been superimposed by the despair of abject misery. The international compassion generated is salutary but, as with Nicaragua, it raises questions not only as to where the relief funds will go, but the social foundations of the power itself.

Compassion was never a familiar feature of Guatemala's landscape, nor could it be. The history of the last two decades is proof sufficient. For, to ask for compassion is to ignore the role of the Indian not only in Guatemala but in the Americas, as the creator of wealth for an alien race, the Spanish *criollos* and the transnational companies. After the initial 'shock' and the incantations of ruling class condolences, the visitor meets the familiar attitudes that one finds among the dominant groups. But what the visitor will not be told is that the number of victims of physical liquidation (30,000) is higher than that of the victims of the quake itself.

President Kjell Laugerud now excoriates his ruling class for its callousness in ignoring the plight of the Indians. "Many wealthy farmers, businessmen and industrialists have not shown an understanding of the existence of a national tragedy. I call upon them to act in the service of the communities where their fortunes were made."<sup>3</sup> The benign utterances of a Somoza of Nicaragua a few months ago were of the same order, and we now know to whom the international "aid" has gone. Laugerud, a military man who had won the 'elections' by sheer fraud, and whose credentials are unsullied in view of his participation in the destruction of rebels and dissident opinion — this man cannot be castigated as a sentimentalist. He understands the mainsprings of class

reality since Guatemala is the prime exhibit of a successful Vietnamisation applied to the Americas. The *New York Times* also confuses (but for different reasons) liberal compassion with the laws of capitalism.<sup>4</sup>

The earthquake did not invent the poverty of the Indian and Ladino population, it merely highlighted the political anatomy of a banana republic, and the permanent violence (in the broadest connotations of that concept) which underpins it. The official indicators are suggestive: 1 per cent of the population owns nearly 80 per cent of the land,<sup>5</sup> 5 per cent of the population receives 34.5 per cent of the national income; 70 per cent of the population receives an average annual income of \$ 42.00 and 75 per cent of the population is illiterate,<sup>6</sup> which rises to as high as 85 per cent for the rural population. Around one-fifth of the urban labour force is permanently unemployed, not to speak of the endemic underemployment. Despite innumerable land reform measures that were supposed to have been taken since 1954, the land structure has not appreciably altered. The United Fruit Company is no longer a landowner, but its lands have been taken over by the Del Monte Corporation. Indeed what land has been distributed has been unused marginal land. And the latest data would also suggest that inequities in the pattern of land distribution have been accentuated.

But the past is not too remote to recall the abortive attempt to carry through land reforms. The Vietnamisation of Guatemala that began with the ouster of a democratically elected government in 1954 continues to this day. And it was here that one saw so blatantly the relationship between the traditional oligarchy, the army and the transnational power in which the CIA played such a signal role. The United Fruit Company however seems to have gained a pyrrhic victory. The name itself had become so ignominious that the late Eli Black (who was driven to suicide by his own financial malpractices in the 70s) changed it to the United Brands. But there were also others to learn from this experience. At the time of the Cuban expropriations of UFC a company official told me, "It was Guevara who said to us that you were lucky to be alive. We'll let you go this time, but we'll never forget what happened in Guatemala and your role in it."

The parliamentary period that began in 1944 with Arevalo and ended with the ouster of the constitutionally elected government of Jacobo Arbenz in 1954 was characterised by a liberal approach to economic and political change. With the wisdom gained from one's knowledge of the conduct of the CIA acting as the political agent of transnational interests during two or three decades, we can now see in retrospect the violence of rare intensity that was unleashed against the Arbenz government.

The conspirators first surfaced at the end of the Truman administration in 1952. In this conspiracy they were joined by Venezuela, Honduras, Nicaragua and even the constitutional 'democracy' of Jose Figueres in Costa Rica, not to speak of the United Fruit, foreign capital and the domestic oligarchy. Commenting on the role of the company in the destruction of Guatemalan democracy almost two decades after the events, Tad Szulc, then of the *New York Times* noted that the company's Boston headquarters "as I still vividly recall, was at the time of the 'Liberation' an excellent source for newsmen in following on an hourly basis the progress of the invasion."<sup>7</sup> As an historian of the Du Pont de Nemours family noted:

Eisenhower's administration had already protected many companies in which the Du Ponts had interests. In 1954, for example, United Fruit was spared the indignity of having to surrender 400,000 acres of unused land to the Guatemalan government for redistribution to peasants. The Guatemalan government was willing to provide compensation and 3 per cent interest. A US arms embargo followed, backed finally by an open invasion from Honduras given air cover by F-47 bombers flown by the CIA. The United Nations protested and the Security Council authorised the sending of an emergency peace-keeping force to guarantee Guatemala's borders, but the temporary president of the Security Council, who happened to be the US ambassador, failed to give the Secretary-General the needed order. The Guatemalan government was overthrown. The head of the CIA, General Walter Bedell Smith, then joined the board of United Fruit, while United Fruit's president, Allen Dulles, became CIA director.<sup>8</sup>

Arbenz's support was derived from the peasant associations and the labour movement; but he did not intend to initiate a socialist order since, as he explicitly stated, the regime wanted to diversify its foreign investment portfolio and was actively seeking foreign investment not only from the US but from the leading market economies of Western Europe. The repression that



followed was characteristic, and in the words of Vice-President Nixon, "the goal of president Castillo Armas is to do more for the people in two years' time than the communists were able to do in ten years... This is the first instance in history where a communist government has been replaced by a free one. The whole world is watching to see which does the better job. If Castillo Armas' goal is realised, communism will suffer a blow from which it can never recover in the Americas."

The Cuban revolution was four years in the future, and Nixon's Guatemala had served as a teacher by negative example, a point stressed by Guevara repeatedly. But the world was not long in seeing what these goals were. The 'Preventive Penal Law against Communism' was only one piece of legislation among a myriad of repressive legislation that was to blossom. But it was an exercise in superfluity since power did not require such legal charade to kill. Within less than 6 months an estimated 8,000 workers, peasants and intellectuals, trade union leaders and others that supported Arbenz were to be killed and 20,000 imprisoned, some of whom were never to be heard of again. As was customary, the epithet 'communist' was used indiscriminately to eliminate those judged subversive, irrespective of whether they supported Arbenz or not. Almost 533 unions were dissolved, notably those of the United Fruit and the International Railway Company of America, its partially owned subsidiary.

The membership of the trade union movement shrank from about 120,000 to less than 20,000. At present the trade union movement is overwhelmingly official and correspondingly corrupt, with established links to the mafia. The mode of repression that followed can be said to have provided a model to Pinochet; rent laws were abolished; the experts of AID (as with the Chicago university advisers in Chile today) advocated open economic liberalism, and total liquidation of projected reforms, including minimum wages. All the land expropriated was returned to their owners and, in addition to returning the lands to the United Fruit, the government offered it financial compensation for 'damages' that had been inflicted on the company up to 'liberation', as the massacre was now officially re-baptised. Again, as with Pinochet's regime, the 'liberation' proceeded to destroy a wide range of books, including those of Miguel Angel Asturias, Anatole France and Victor Hugo. This was what Castillo Armas was to call the "feast of the bookburners".

The Church, which had openly opposed every facet of parliamentary democracy since 1944 and which totally identified itself with the 'liberation', was fully restored with its pre-1871 privileges, a gesture which received the benediction of Cardinal Spellman. Yet the Church could not maintain a monolithic unity even among the younger members of the clergy, as evidenced in the numbers executed over the next ten years. And though Ambassador Peurifoy was to leave Guatemala the US embassy continued to present lists of communists that were to be executed to the military junta.

The Armas-Nixon goals had been achieved; Guatemala became a paradise for foreign investors: low tax rates, the dissolution of a trade union movement, lavish state subsidies. It became the third Latin American country to sign an Investment Guarantee Agreement with the US government under which US capital was insured against losses from currency inconvertibility and expropriation. In fact, the Guatemalan legislation became the guideline for IBRD foreign investment codes of conduct. Such modes of repression by their own internal logic were to generate their opposite — namely a revolutionary guerilla movement bent, unlike the Arevalo-Arbenz reforms, on the overthrow of the existing property relations. Castillo Armas could not solve the dilemmas facing the country and his masters became quickly disenchanted with his services which proved embarrassing to them. The regime of Castillo Armas (54-57) was sequelled by that of Fuentes (58-63), Azurdia (63-66), Montenegro (1966-1970), Arana Osorio (1970-74) and that of Kjell Laugerud (1974- ). But it was the repression of Arana Osorio in the first half of the seventies that outstripped in intensity that of the earlier period. It has been estimated that 15,000 people were murdered and 25,000 imprisoned. The social upsurge was crushed, but Guatemala continued, in the words of its leading spokesman, to vaunt itself as a "constitutional pluralist democracy". Like human life, words have lost all meaning.

It would be difficult to examine or ignore the extent of the wave of terror that continues to this day, albeit in diminished impact. But what is important is that there are now divisions within the dominant ruling oligarchy. Sandoval Alarcon, the vice-president educated in Franco's military establishment, is an advocate of fascism of which his Movement of National Liberation is the highest expression. Asano Osorio, the present military boss of the region known as the

"butcher" and is the most powerful military man and a hardened fascist. But two decades have wrought their changes. The ruling oligarchy no longer presents a united front, since its traditional wing is now being challenged by powerful new economic groups that have acquired ascendancy in meat exports, fisheries and sugar and in which certain eminent military leaders play a crucial role. The techniques of the Mafia are the tools of the new business oriented oligarchy.

It would be not unrealistic to call these differences mere shadow boxing. For, while Osorio and Alarcon represent the highest manifestations of repression, Laugerud represents only a slightly milder form of it. The difference is one of degree, not of kind. To expect the regime to respond, therefore, to the Indian peasants and the poor is not only fatuous, but dangerous since it will only serve to encourage illusions at a time when what is needed is a full-scale restoration of democratic pluralism. But the conditions for a mass upsurge are all here; but in what direction and at what tempo it will move is still not clear for the forces that are to effect such a transformation are yet in gestation.

## Notes

- 1 *New York Times*, February 13, 1976.
- 2 T and M Melville, "Guatemala: The Politics of Land Ownership", New York, 1971, and E Wolf "Sons of the Shaking Earth", Chicago University Press, 1959.
- 3 *International Herald Tribune*, February 22, 1976.
- 4 The *New York Times* reporter noted that it was heart-rending to listen to "rich Guatemalans in business talk about the tourist industry while poor people slept under makeshift tents in the streets". In terms of their class interests this is perfectly comprehensible. Only the coffee industry earns more foreign exchange than tourism which netted \$ 86 million. The tourist industry is owned by an indigenous oligarchy, foreign airlines and transnational hotel chains. Their conduct is the normal trajectory of bourgeois modes of conduct — under any conditions.
- 5 IBRD "Current Economic Position and Prospects of Guatemala", CA-3a, Volume 1, December 1970.
- 6 For an excellent picture see, "Guatemala" published by the North American Congress on Latin America, Berkeley, 1975.
- 7 *New Republic*, "US and ITT in Chile", June 30, 1973.
- 8 Gerard C Zilg, "Du Pont: Behind the Nylon Curtain", New York, 1974, pp 388-389.



# Press: Strong Medicine

T R Andhyarujina

**The Law of Press Censorship in India** by Soli J Sorabjee; N M Tripathy 1976; pp 272; Rs 35.

"THERE was no pre-censorship of the Press on any of the previous three occasions when the country was engaged in actual war with its hostile neighbours. Not unnaturally, the events of June 26, 1975, and in particular the pre-censorship imposed on the Press were a shattering experience, somewhat like the after-effects of a strong dose of medicine." The author of this book obviously recovered from the after-effects of the strong medicine not only to cross swords in two legal battles with the Censor in the Bombay High Court but also later to write this eminently useful and informative book on the Law of Press Censorship in India.

Though 'the Censor' looms large in the book, we find here an exposition of the law relating to freedom of the Press in India — in normal times and in emergencies. As such, 'the Censor' in Sorabjee's book is not merely the government official with his scissors and blue pencil, but also the legitimate prohibition of publishing such as in the interests of the security of the State, public order, etc. A large part of the book deals with the pre-censorship under Rule 48 of the Defence and Internal Security of India Rules, 1971, and the Censorship Order of June 26, 1975, made under that Rule and the prohibition of publication of 'prejudicial report' under the Defence and Internal Security of India Act 1971. The three judgments of the Bombay and Gujarat High Courts, which are frequently referred to in the commentary and large extracts of which have been reproduced in the book in Part II, pertain to recent orders issued by the Censor acting under Rule 48.

Despite proclamations of emergencies and enactment of severely restrictive laws on the freedom of Press — like the Defence and Internal Security of India Act, 1971 and the Censorship Order — the citizen may still have a large and legitimate area of freedom of publishing in which the Censor cannot lawfully intrude; if he did so, the courts could be moved to prevent his intrusion. The province of the Censor and the residual areas of permissible freedom of expression under the pre-

sent law have been ably expounded by the author. Apparently the theme of the book is the statement of Dean Freund that "to know what you may do and what you may not do and how far you may go in criticism is the first condition of political liberty".

In Part III, the author has collected all the constitutional and statutory provisions relating to the freedom of the Press, proclamation of emergency, relevant sections of the Defence and Internal Security of India Act, 1975, and Rules made under that Act. He has also included here, the Censorship Order of June 26, 1975, as well as the "Guidelines for the Press" and the relaxation issued by the Chief Censor during the present emergency. There is a convenient chronology too of material dates and events bearing on the proclamation of emergency, and the dates on which rules relating to censorship were enacted and amended. This part of the book will be a useful aid to the lawyer and the journalist who wish to know the statutory law on the subject.

Part II of the book, comprising 54 shoulder-noted pages, is an outstanding exposition of the law. Clarity of exposition is matched by accuracy and brevity. The commentary begins with a treatment of the constitutional protection to, and the permissible limits of restraint on, the freedom of the Press in India; it then states in brief the comparative law on the subject in India, the UK and the US. The constitutionality of pre-censorship under Rule 48 of the Defence of India Act is discussed in the context of the suspension of Fundamental Rights under the present emergency. As all usual avenues of legal challenge to legislation because of the suspension of Fundamental Rights are closed, Sorabjee finds scope for challenging the validity of Rule 48 and finds the Censorship Order violating Article 301 of the Constitution (Freedom of Trade and Commerce) — the article which is generally regarded as the last lingering hope of the lawyer-draftsman and the despair of the conscientious judge!

The author has perhaps underesti-

mated the intractable problems arising from the application of the complex Articles, in the Constitution, relating to inter-state trade and commerce. Finally, the Chapter gives a succinct treatment of the legal powers of the Censor, delineates the area of his control over the Press, and points to the permissible challenges to his power in a court of law even with the present restrictions arising from the suspension of Fundamental Rights.

Every proposition of law is supported by a citation of case law from Indian, English, US and Canadian cases. The author has made no attempt at pretentious corrections of the law laid down by the courts, but where a court has obviously gone wrong, the author rightly points out the error — as for instance of the Gujarat High Court in holding some parts of the Censorship Order unlawful.

Part III of the book — 115 pages — consists of extracts from three recent judgments on 'Censorship', in *Lokurkar vs Binod Rao*, *M R Masani vs Binod Rao* of the Bombay High Court and *C Vaidya vs D'Penha* by the Gujarat High Court. The commentary is correlated to extracts from these judgments by appropriate notings.

It is important to note, however, that the author wrote this book with the law as it stood on April 19, 1976. On April 28, 1976, with the judgment of the Supreme Court in the Habeas Corpus cases (*Additional District Magistrate Jubulpore vs Shivalkant Shukla*) came the great divide in the history of constitutional justiciability in India. The Supreme Court judgment knocked out the *locus standi* of a petitioner to challenge an illegal action during the emergency. The basis of the author's thesis in this book is the justiciability of the Censor's action in the rule of law. Does this stand after the Supreme Court's verdict in the Habeas Corpus cases? Does the citizen have a remedy against the Censor's illegal actions? This is the great question which time and the Supreme Court alone will answer.

When corresponding with the Circulation Department, subscribers are requested to mention their subscription numbers.





This is only an announcement and not a Prospectus

# BASANT PAPER MILLS

(Incorporated at Calcutta on 5th April 1974 under the Companies Act, 1956)

Regd. Office : 2, Church Lane, Calcutta 700 001 Head Office & Admn. Office : 8, Camac Street, Calcutta 700 001

**Announcement regarding the Public Issue of 6,30,000 Equity Shares of Rs. 10 each and 15,000 11% Redeemable Preference Shares of Rs. 100/- each (free of Company's tax but subject to deduction of tax at source at the prescribed rates)**

Applications have been made to the Calcutta, Bombay and Delhi Stock Exchanges for permission to deal in and for an official listing of Equity and Preference Shares of the Company.

The Subscription List will open at the commencement of banking hours on 7th September 1976 and will close on 17th September 1976 or earlier at the discretion of the Board of Directors of the Company but not before 9th September 1976.

Application Forms with copies of the Prospectus may be obtained from the Registered Office of the Company, Underwriters, Bankers and Bankers to the Issue or from any of the offices of the Bankers to the Issue mentioned below.

## HISTORY AND BUSINESS OF THE COMPANY

The Company was incorporated on 5th April 1974 as a Public Limited Company in the State of West Bengal and certificate for commencement of business was issued by the Registrar of Companies, West Bengal, Calcutta, on 30.9.1974. The immediate main object of the Company is to set up a Paper Mill for manufacture of Packing, Wrapping and Corrugating Paper and Board for which Industrial Licence No C: IL: 274 (75) dated 29.7.75 has been obtained by the Company.

## PROJECT

The project envisages to manufacture 6000 metric tonnes of different varieties of MG Paper and Board per annum. Provisions have been kept for substantial future expansion and diversification to other varieties of Paper. As per tests carried out by Institute of Paper Technology, Saharanpur, the Company will be able to manufacture 'SACK KRAFT' Paper also.

## LOCATION

The Company's factory is coming up at Basantnagar P O Ramnagar, in the District of Varanasi and is about 14 Kilometres from Varanasi City. The Company has already acquired freehold and fairly developed land admeasuring about 18.58 hectares from cultivators of the area. Civil construction at factory site is nearing completion.

Erection of Plant and Machinery is in progress.

The Company has been sanctioned 1300 KW of power by Uttar Pradesh State Electricity Board and a separate feeder line for the same is being laid down.

The Company has already received approval from State Effluent Board for effluent disposal.

Barring unforeseen circumstances it is expected that the Company will be able to commence commercial production by the end of this year and would be in a position to declare dividend within a reasonable period from the commencement of commercial production.

## BOARD OF DIRECTORS

**Shri Gouri Shankar Dalmia, Chairman**  
(S/o. Late D. D. Dalmia)  
Jasidih, Bihar.  
(M.L.C. from Bihar during 1937-72)  
*Industrialist*

**Director —**  
Bihar State Industrial Development Corp'n. Ltd.  
Bihar State Financial Corporation and other Companies.

**Dr. Ramesh C. Vaish**  
(S/o Late S. Vaish)  
15/96, Civil Lines, Kanpur  
*Chartered Accountant & Tax Consultant*

**Director —**  
J. K. Synthetics Ltd.  
Swadeshi Cotton Mills Co. Ltd. and other Companies.

**Shri Rajesh Prasad Khaitan**  
(S/o. Late R. K. Khaitan)  
2, Church Lane, Calcutta-700 001  
*Solicitor*

**Director —**  
Empire Jute Co. Ltd.  
Indian Express (Bombay) Pvt. Ltd. and other Companies.

**Shri A. N. Roy**  
(S/o. Late Ajoynath Roy)  
6/B, Bright Street, Calcutta.  
*Service*

**Shri R. B. Saksena**  
(S/o. Late Ramchandra Sahai)  
10, Secretariat Bungalow, Lucknow  
*Govt. Service (I.A.S.)*  
Managing Director —  
PICUP, Lucknow.  
**Director —**  
Willard India Ltd. and other Companies.

**Shri N. L. Dalmia, Managing Director**  
(S/o. Late Basant Lall Dalmia)  
P-4, CIT Road, Scheme VI M  
Calcutta-700 054

## SHARE CAPITAL

A. Authorised	Rs.
20,00,000 Equity shares of Rs. 10/- each	2,00,00,000.00
25,000 Preference Shares of Rs. 100/- each	25,00,000.00
	<u>2,25,00,000.00</u>

## B. Issued, Subscribed & Paid-up

700 Equity Shares of Rs. 10/- each allotted as fully paid up to the subscribers to the Memorandum of Association for cash at par	7,00,000.00
4,19,300 Equity Shares of Rs. 10/- each subscribed by and allotted as fully paid up to the Directors, their friends and relatives, and employees of the Company for cash at par	41,93,000.00
	<u>42,00,000.00</u>

## C. Present Issue

NOW OFFERED TO THE PUBLIC FOR SUBSCRIPTION FOR CASH AT PAR.

6,30,000 Equity Shares of Rs. 10/- each	63,00,000.00
15,000 11% Redeemable Cumulative Preference Shares of Rs. 100/- each (free of Company's tax but subject to deduction of taxes at source at the prescribed rates)	15,00,000.00
	<u>78,00,000.00</u>

## APPLICATION & TERMS OF PAYMENT

	Equity Rs.	Preference Rs.
On Application	2.50 per share	25.00 share
On Allotment	2.50 per share	25.00 share

The balance shall be payable in calls or calls as may be decided by the Board of Directors of the Company. There shall be an interval of not less than one month in between the first call. Calls shall be made proportionately and simultaneously both Equity Shares and Preference Shares.

Applications will be considered from Indian Nationals resident in India.



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Cumulative Preference  
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and must be for a minimum of fifty  
shares or multiples thereof in case of  
Equity Shares and for a minimum of  
five shares or multiples thereof in case  
of Preference Shares.

## UNDERWRITERS

Out of 6,30,000 Equity Shares and  
15,000 Preference Shares offered to the  
public, 4,50,000 Equity Shares and  
15,000 Preference Shares have been  
underwritten as follows :

Name and address of Underwriters	Amount Under- written Equity Preference (Rs in lakhs)	
Industrial Development Bank of India (IDBI) 17, Cooperage, Bombay-400039	17.00	—
The Industrial Credit and Investment Corpn. of India Ltd. (ICICI) 163, Backbay Reclama- tion, Bombay-400020	7.00	—
Industrial Finance Corpn. of India (IFCI) 16, Parliament Street, New Delhi-110001	7.00	—
Life Insurance Corpo- ration of India (LIC) Yogakshema, Jeevan Bima Marg, Bombay-400020	1.00	6.00
Madhesiya Industrial & Investment Corpn. of U.P. Ltd (PICUP) 8, Vivekanand Marg, Lucknow (U.P.)	—	3.00
U.P. State Industrial Development Corpn. Ltd. (UPSIC) 117/130, Sarvodaya Nagar, Kanpur.	2.00	6.00
Syndicate Bank Manipal, Karnataka	3.00	—
Indian Overseas Bank Jahangirabad Mansion, Ashok Marg, Lucknow	3.00	—
Union Bank of India 239, Backbay Reclama- tion, Bombay 400021	5.00	—
	<u>45.00</u>	<u>15.00</u>

The Promoters and Directors have given a joint and several undertaking to the Institutional Underwriters that in the event of Public Issue being undersubscribed, they will subscribe to the unsubscribed portion of the Equity Shares to the extent of 1,80,000 Equity Shares of Rs. 10/- each, which have been offered to the public but not underwritten before calling upon the underwriters to put in their application in discharge of their underwriting obligations. No underwriting commission and brokerage will be paid or payable to the Promoters in respect of such shares.

## Brokers To The Issue

Place, Siddons & Gough (P) Ltd, 6, Lyons Range, Calcutta 700 001. Stewart & Co., 14, India Exchange Place, Calcutta 700 001. Brijnath Khandelwal & Co., 13, India Exchange Place, Calcutta 700 001. C. Mackertich 7, Lyons Range, Calcutta 700 001. Chunilal T. Mehta, 8, Lyons Range, Calcutta 700 001. Dayco, 7, Lyons Range, Calcutta 700 001. Sajjan Kumar Saraf, 7, Lyons Range, Calcutta 700 001. Ramnarain Kayan & Co., 7, Lyons Range, Calcutta 700 001. Shubhkaran Saraf & Co., 7, Lyons Range, Calcutta 700 001.

Beharilal & Co., Stock Exchange Building, Asaf Ali Road, New Delhi. Bharat Bhusan & Co., 107, Rohit House, 3, Tolstoy Marg, New Delhi. Harbans Singh Mehta & Co., 33, Regal Bldg., Parliament Street, New Delhi 110 001. J. C. Mehta & Co. 44, Delhi Stock Exchange Bldg. Asaf Ali Road, New Delhi 110 001. Jalan & Co., Stock Exchange Building, Asaf Ali Road, New Delhi 110 001. Surinder Rode & Co, 3, Delhi Stock Exchange, Asaf Ali Road, New Delhi 110 001. Vinod Kumar & Co., A-6, Connaught Place, New Delhi 110 001. H. P. Mehta & Co., Surya Kiran, Kasturba Gandhi Marg, New Delhi 110 001.

Dalal & Broacha, Stock Exchange Central Bldg., No. 29, Dalal Street, Fort, Bombay 400 001. Harish Chandra Gutt & Co., 45/47 Bombay Samachar Marg, Bombay 400 023. Jamnadas Morarjee & Co., 5A Hamam Street, 400 023. Jasvantlal Chhaganlal, Bhupen Chambers, 9/10 Dalal Street, Bombay 400 001. Lewis & Jones, Bank of Baroda Building Apollo Street, Fort, Bombay 400 001. Merwanjee Bomanjee Dalal, Allahabad Bank Building, Apollo Street, Bombay 400 001. Prabhudas Lilladher, Stock Exchange, 5A, Hamam Street, Fort, Bombay 400 023. Valji Bhimji & Co., 24 Stock Exchange Central Bldg., Dalal Street, Fort Bombay 400 023.

Chitra & Co., 322/323 Linghi Chetty Street, Madras 600 001. Paterson & Co., 11/12, Second Line Beach, Madras 600 001. Subramaniam & Co., 13/14, Second Line Beach, Madras 600 001. Jahgirdar & Co., 21, Main Road, Ses-hadripuram, Bangalore 560 020. M. Nanjappaiah Jahgirdar, 205, Cavalry Road Bangalore 560 042. Vijai &

Company, 9, Eleventh Main Road, Malleswaram, Bangalore 560 003.

P. B. Afzulpurkar, 4-5-195, Sultan Bazar, Hyderabad 500 001.

Champaklal Bhailal Chokshi, Manek Chowk, Near Share Bazar, Ahmedabad 380 001. Laxminarayan N. Gupta & Co., Anandji Kalyanji Building, Opp. Dhanasuthars' Pole, Relief Road, Ahmedabad 380 001.

Pushkarlal Ghudawala 44, Bada Sarafa, Indore 452 002.

## MANAGERS TO THE ISSUE AND ISSUE HOUSE

CA Financial Consultants,  
75, Park Street, Calcutta 700 016.

## BANKERS TO THE ISSUE

Union Bank of India  
India Exchange Place, Calcutta 700 001.

and its main branches at Bombay, New Delhi, Bangalore, Ahmedabad, Indore, Hyderabad, Madras, Varanasi (Main) Allahabad, Lucknow, Badhoi, Chakia, Chandoli, Gyanpur, Mugalsarai, Parao, Jaunpur, Ajmgarh, Ghazipur, Zamania, Faridabad, Mirzapur, Kanpur, Patna, Ranchi, Bareilly, Dehra Dun, Meerut, Ghaziabad, Hardwar, Jhansi, Roorkee, Poona and Chandigarh.

Syndicate Bank  
6, Netaji Subhas Road, Calcutta 700 001

and its main branches at Bombay, New Delhi, Bangalore, Ahmedabad, Indore, Madras, Lucknow, Mathura, Asansol, Cuttack, Rajkot, Ghaziabad, Faridabad, Chandigarh, Hyderabad, Bhubaneswar, Jaipur, Jammu and Srinagar through Jammu and Kashmir Bank Ltd.

State Bank of India  
1 Strand Road, Calcutta 700 001.

and its main branches at Bombay, New Delhi, Bangalore, Ahmedabad, Indore, Hyderabad, Madras, Varanasi (Main), Ramnagar, Narainpur, Chakia, Chandoli, Chunar, Mirzapur, Mugalsarai, Allahabad, Lucknow, Kanpur, Banaras Hindu University-Varanasi, Badhoi, Churk, Ghazipur, Jaunpur, Jammu, Pratapgarrh, Shahganj, Faizabad, Gorakhpur, Saharanpur, Mathura, Srinagar, Ghaziabad, Faridabad, Jaipur, Aligarh, Chandigarh and Patna.

## BANKERS TO THE COMPANY

Syndicate Bank  
42 Vivekanand Road,  
Calcutta 700 007.

## AUDITORS

B. Chhawchharia & Company  
75, Park Street, Calcutta 700 016.

## SOLICITORS

Rajesh Khaitan & Company  
2, Church Lane, Calcutta 700 001.

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75, Park Street, Calcutta 700 016.



# Between Vision and Action

Sudhir Chandra

**An Opposing Man** by Ernst Fischer, Allen Lane, London, 1974, pp XX + 418, £ 6.

"If ever we return to our own countries, there is one thing we will have to recognise from the start: the struggle for Socialism means the struggle for democracy. If we Communists fail to be the most consistent of democrats, history will pass us by." This was Palmiro Togliatti talking to Ernst Fischer, within the Comintern premises during the Stalinist Terror. Driven out by the eruption of Fascism in their own countries, Italy and Austria respectively, they had taken refuge in their ideological homeland. But the 'horrible half-light' of the Soviet reality, confronting its new citizens with 'the ghastly caricature' rather than 'the true face of Communism', generated its own inexorable logic. Hence, eventually, the resolve — "if ever we return to our own countries" — to struggle for more democracy.

The triumph of this logic, however, was not simple. There was a crisis of perception. The Soviet Union had been a vision. Coming here was the fulfilment of a dream, the beginning of a pilgrimage, a second home-coming. "A sense of elation: here is a country with the *Internationale* for her anthem, a country where all those things are triumphant for which men in the capitalist countries are shot, beaten up and imprisoned. We are here not as guests but as people visiting their homeland." On crossing the frontier, the vision gave place to the reality. "But what is reality?" Surely the *bourgeois* mode of perception must be playing tricks. There ought to be "the determination to bring about a radical change in yourself, to renounce all scepticism, individualism, intellectualism". Intellect and emotions were in league to suppress the stirrings of disbelief. What the eyes saw — "grey, cheerless, overbearing, authoritarian" — must be mere appearances. Attempt must be made "to discover behind these alienating attributes the revolutionary substance", and to establish identification with it. Besides this willing capitulation, there were the difficulties of knowing things in a closed system where hardly any one trusted any one else; the psychosis of fear produced by the combination of terror and propaganda:

The way in which permanently maintained atmospheric pressure can distort consciousness is truly terrifying. The most absurd statements, the most implausible lies begin to take effect if repeated day in, and day

out. Arrests and accusations on such a scale *cannot* be the result of pure arbitrariness — and arbitrariness on *whose* part? Of course, once an apparatus is in motion, it is bound by its very nature to gather momentum, and its progress cannot be easily controlled. Vigilance! Are you blind? Can't you see the enemy? Anyone may be an enemy, unless you know him inside out. Vigilance became a matter for competition. Haven't you discovered an enemy yet? You mean to say your organisation's the only one without an enemy? How strange, how suspect!...

In the event, however, the increasing discrepancy between the vision and the reality of the Soviet system proved unequal to the task of sustaining the conspiracy of intellect and emotions. The crisis of perception was over. Events followed in quick succession, harrowing and irrational events, both national and international, that defied any understanding in ideological terms; prominent among these being the 'trials' of Stalinist Russia and its friendship with Hitler's Germany. It was impossible not to move away from ideology and "appreciate the alarming implications of power".

Hence the resolve, if ever we return to our own countries ...

For those interested in the power of vision and in the abuse of power this autobiography of Ernst Fischer, the Marxist humanist, provides fascinating, terrifying, indispensable reading. Eros and Revolution — burning passion for life and passionate concern for fellow human beings — alternate and overlap with an intensity that evokes the quality of this extraordinary man's life. The young sickly child, whom the doctors had despaired of saving, deciding to live and making a habit of defying and outwitting death irrespective of whether it threatened him as the agent of nature or as the instrument of capricious

rulers' wrath; the romantic Social Democrat being almost unwittingly drawn into the welter of politics; the loves and tribulations; the daring, though fortunate, escapades in Soviet Russia; the ruthless self-analyses; the by no means fortuitous resemblances between the concentration camps of Stalin and Hitler; the heroism of individual defiance and also its futility in so many cases; the irrepressible spontaneity of human volition in the face of injustice and the calculated cruelty of the power apparatus; shame, ecstasy, anger but never indifference; every word charged with feeling and yet carefully weighed.

Not many readers will find it easy to retain their faith in a visionary future for humanity after reading this book — so shocking are the details of contemporary history as revealed by Fischer and so gripping is his invocation of events. And yet Fischer continued to dream dreams and envisage visions. Appalled by the caricature, he kept his faith in the true face of Communism. He who had seen the monstrosities of power in different ideological settings believed in the possibility of achieving "radical social change without bloodshed". And this in spite of the last major political shock of his life when the Czech experiment of 'Socialism with a Human Face' was forcibly cut short by the Soviet Union. Incidentally, lest one might be tempted to dismiss Fischer as an idle dreamer, his Russian experience had enabled him to warn of Soviet intervention in Czechoslovakia.

Socialism with a human face, revolution without bloodshed, reconciliation of socialism, freedom and democracy ... Are these just figments of an utopian imagination? How does one take care of the recalcitrant behaviour of power? Fischer, now dead, offers us the hope, but not the strategy. Or is this all, as he wrote in 1945 on the eve of his departure from Moscow to Vienna, "the dream of a fool, not that of a politician"? Then why did he inspire the idea of the Prague Spring?

## THE RURAL ELITE IN AN INDIAN STATE; A CASE STUDY OF RAJASTHAN.

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# Political Economy of Malaria De-Control

Harry Cleaver

*The history of public health and malaria control plainly demonstrates the necessity to question the broader framework within which malaria programmes are produced and must operate. Much of the effort which contributed to the development of public health, including malaria control, could only be understood as part and parcel of the interplay of social conflicts attendant upon economic growth and development. In particular, public health has played a key role in the on-going struggle of people for better lives and the demands of business and government for social order and reinvestible resources.*

*What has been lacking in the various evaluations of the continuing failure of the Indian malaria eradication programme is a broader perspective which would seek to explain not only the degree of programme inadequacy but also the reasons for it. The various analyses have themselves failed to come to grips with the larger problems.*

*By remaining narrowly focused on the programme itself, they have not questioned the reasons for the changing place of malaria control within the overall pattern of government socio-economic policy. Because of this failure the reports have not responded to the broader questions raised by some critics who have doubted the very possibility of reform under the present system.*

THE continuing rapid spread of malaria in India is an ominous development. For over ten years the incidence of this debilitating and sometimes fatal disease has been increasing. More importantly, the rate of increase has been dramatic and shows no signs of slackening. Between 1969 and 1975 we have seen a doubling pattern which has only been broken briefly in 1973 and has since resumed. By last year, according to government statistics which probably understate the situation, malaria had spread to a dismaying 4,200,000 persons. While far below the 75 million of the early 1950s this is already an alarming occurrence in terms of human suffering and is getting steadily worse.<sup>1</sup>

This trend had remained unchecked despite considerable publicity both in India and in the international community. The World Health Organisation, which constantly monitors the health situation throughout the world has pointed repeatedly over the years to the recrudescence of the disease in several nations including India. By 1975 the WHO director-general was writing of a "generally worsening situation" in the world incidence of malaria, of which the "hard core of deterioration" was in Asia and especially in India.<sup>2</sup> Even the American press has carried numerous stories of India's declining control over malaria.<sup>3</sup> In India itself the press has carried numerous reports and critiques and the National Malaria Eradication Programme publishes regular statistics and reports.

Moreover, this public discussion has

already contained considerable criticism of the government's failure to undertake adequate action to stem the current trends. These criticisms have ranged from the complaints of malaria scientists about inadequate research funding (in the light of growing resistance of both mosquitoes and parasites to treatment)<sup>4</sup> through accusations of complacency, inefficiency, and underfinancing of the eradication programme,<sup>5</sup> to demands for the integration of malaria control into a broadened public health service<sup>6</sup> or even for a remaking of the Indian health system in the image of the Chinese model.<sup>7</sup>

As a result of these discussions the Indian government has commissioned a whole series of special studies to analyse the situation and to recommend policy changes. Perhaps the most thorough of the reports by these groups was that of the In-Depth Study Group composed of WHO, American and Indian experts which was submitted in November 1970.<sup>8</sup> Although the conclusions of that careful study were numerous and covered the whole malaria programme from research to field practices, the results were limited. The government did expand its expenditures somewhat and changed some procedures. But on the whole the bulk of the recommended changes remained unimplemented.<sup>9</sup> More recent studies have been both less extensive and less far-reaching in their recommendations. They have increasingly accepted the government's inaction as a given and have concentrated on making the best

of a declining situation and cutting losses.<sup>10</sup>

Now according to malariologists I have consulted, these reports have done a fairly good job of isolating many of the relevant factors in the resurgence of malaria. They have accurately pointed to such factors as the difficulties raised by vector and parasite resistance, or the inadequacy and ill-timed procurement and dissemination of insecticides, or the rising price of some chemicals because of rising prices of the oil from which they are derived, or the understaffing of regional programmes and inconsistency of attention from overloaded health workers, etc.<sup>11</sup> In short, in terms of technical and budget analysis there has been no lack of either information or correct evaluation. The problem is not in the government's lack of expert advice but in its failure to act upon it.

What seems to be lacking in the various evaluations of the continuing failure of the Indian malaria eradication programme is a broader perspective which would seek to explain not only the degree of programme inadequacy but the reasons for it. The various analyses have themselves failed to come to grips with the larger problems. By remaining narrowly focused on the programme itself they have not questioned the reasons for the changing place of malaria control within the overall pattern of government socio-economic policy. Because of this failure the reports have not responded to the broader questions raised by some critics who have doubted the very possibility



of reform under the present system and who have begun to look beyond it.

Now the indispensability of such questioning of the broader framework within which malaria programmes are produced and must operate is plainly demonstrated by the history of public health and malaria control. Although a detailed history of the development of public health which places it within its changing social context has yet to be written, there has been some work on the history of medicine which begins this task. As part of my own research on the development of the American economy and on its expansion into rural areas at home and then abroad, I have begun to investigate the role of public health. While the material I have gathered by no means constitutes a complete or satisfactory history, it has suggested that much of the effort which contributed to the development of public health, including malaria control, could only be understood as part and parcel of the interplay of social conflicts attendant upon economic growth and development. In particular I have found that public health has played a key role in the on-going struggle of people for better lives and the demands of business and government for social order and reinvestible resources. In what follows I present some of the results of that research which I feel may serve as a useful guide in any effort to understand or influence the development of malaria eradication in India.<sup>12</sup>

#### HEALTH AND DEVELOPMENT IN THE US SOUTH<sup>13</sup>

One of the early, and in the long run most important, efforts to develop public health services in a backward agrarian region was that initiated by the Rockefeller Sanitary Commission in the American South at the turn of the century. At that time there was an attempt by Northern business leaders to speed the development of a "New South" out of the pattern of underdevelopment in which it had sombered since the destruction of the slave economy during the Civil War (1860-65). The overall pattern of that attempt, in which public health appeared as one part of a much larger effort, formed the basis for the subsequent American foreign aid strategies in China in the 1930 and 40s and in much of the Third World after World War II.

This business concern with transforming the South grew largely in response

to the massive upheavals of the Populist revolt and to the expanding needs of American business for markets and industrial labour. The Populist revolt of the late 1900s had seen large numbers of family farmers and sharecroppers rise up against what they felt was their systematic exploitation by Eastern and Northern merchants, banks, railroads and input suppliers. Despite the collapse of the Revolt after 1898, disparate groups of banking, manufacturing and railroad leaders, led by the Rockefeller philanthropies, undertook the development of Southern agriculture the restructuring of Southern education and the transformation of Southern government.

The role of the Rockefeller Sanitary Commission was to propagate a public health campaign. At that time public health organisations were virtually nonexistent in the South and worktime lost due to illness was a major factor limiting the productivity of the workforce both in the fields and milltowns.<sup>14</sup> In the rural areas the most important part of the health work was the Commission's anti-hookworm effort. An anemia-producing, debilitating disease, hookworm was widespread throughout the South, especially in rural areas, where, like schistosomiasis, its parasite was picked up by the barefeet of children and farm workers.

The anti-hookworm campaign was linked to the educational campaigns as much of its propaganda activity was aimed at the schools. The campaign was also carried on in close co-operation with local government. The goal was for private business initiative and finance to lead to governmental funding and the takeover of the whole programme.<sup>15</sup> This represented not only a private determination of the priorities and direction of the new programmes but also a socialisation of the private costs of production and a strengthening of the interventionist role of Southern government on the side of modernising private interests.

Another important aspect of the commission's health work was its direct appeal for the co-operation of farm organisations — the very institutions through which much agrarian unrest was expressed. For the Rockefellers and other businessmen to gain leadership in a cause which not only helped business by increasing productivity but helped farmers by improving health must have been seen by the industrial

sponsors of the campaign as a small but significant step in breaking down farmer antipathy toward big capital which had sparked the populist revolt.

The hookworm campaign was soon followed by an anti-malaria effort in the South during and after World War I. Initiated this time by a strengthened US Public Health Service, but also supported by a Rockefeller programme (run by the same men responsible for the hookworm campaign), the anti-malaria campaign aimed at maintaining the productivity of both the personnel on military bases and the civilian population. Like the hookworm campaign these programmes also contributed to reshaping the character of the Southern state governments.<sup>16</sup>

In this first example, we can see that the explanation for the decision to foster public health in the American South was not based simply on the existence of the disease — hookworm and malaria had been around for years — but on larger socio-political factors which involved the needs both of the rural population and of the business community and their conflictual interaction.

#### HEALTH AND COLONIAL EXPERIENCE

In the Third World the development of modern public health measures were often spurred by the same kind of economic and political factors which existed in the American South: a desire by private business and business-oriented government to increase productivity and to gain the trust and goodwill of the local population and elite. This later was especially true for the Americans in non-colonial situations.

Although it seems that European colonialists often dismissed the feasibility of extensive public health campaigns among the "primitive" indigenous populations<sup>17</sup> both they and the American businessmen who moved abroad were often deeply concerned with the economic impact of diseases like malaria. Some of the earliest and most important scientific work on malaria was done by the British doctor Sir Ronald Ross while working in the colonies (including India), where endemic disease and recurrent epidemics severely hampered colonial exploitation.<sup>18</sup> During the colonial period in India the impact of malaria ranged from the continual loss of productivity and workdays to high infant and adult mortality and the total collapse and depopulation of



whole towns and areas during epidemics. As a result the colonial administration undertook anti-malaria efforts. These however appear to have been sporadic and limited primarily to periods of epidemics and to areas of special interest to the British, e.g., areas of agricultural or other production for export and areas of concentrated British population.<sup>19</sup> Because of the limited nature of these interests the British capitalists and government administrators could hardly have been expected to even try to finance the eradication of malaria in the whole of the country. With only partially effective control, malaria was still a dramatic nationwide problem in 1947 when British direct rule ended. At that time deaths attributable to malaria numbered in hundreds of thousands.<sup>20</sup>

Disease and the resulting low productivity of workers was also a basic problem for US businessmen trying to set up production operations abroad. Where sickness was widespread the simple availability of workers was no guarantee of a usable labour force. The United Fruit Company, for example, was forced to set up hospitals for the workers on its Central American banana plantations as early as 1899 in order to reduce excessive costs associated with illness.<sup>21</sup> Years later a vice-president of United Fruit clearly stated the reasons for his company's concern with its worker's health:

The work that has been done was done for a very practical hard-headed reason — that of self-interest ... sick people cannot work ... It may have been an enlightened self-interest but it was largely done because they (American companies) could not get out the ore, or raise the bananas or pump the oil unless these fundamentals were taken care of.<sup>22</sup>

As with the British, much of the earliest foreign health work by Americans, including scientific research, was directly related not only to business, but also to the military needs of imperialism. It was the extremely high death rates of American soldiers in Cuba during the Spanish-American War which pushed the military doctor Walter Reed to find a way to control yellow fever. It was the imperial acquisition of Panama to build a canal which brought Major William C Gorgas from Cuba to that country in 1904 to fight yellow fever and malaria.<sup>23</sup> In the post-World War II period similar problems with malaria would hamper the US military intervention in South East Asia (see

below). Work in public health was also seen to have an important public relations effect. If economic exploitation and military occupation were the most blatant and odious aspects of the expansion of American business to subject peoples, health care and public health measures were portrayed and often accepted as the kindly and humanitarian side of American intervention. A well known Catholic curate in Latin America, once publicly commented on the programme of the Rockefeller Foundation:

You all know we never cared for or trusted the Yankee, but since this institution has come and worked here and is showing us that they (the Yankees) have some heart in them, we feel like giving them the embrace of brotherhood and making them feel more welcome hereafter. I should love to shake Mr Rockefeller's hand and say, "You are one of us".<sup>24</sup>

The Rockefeller foreign health programme, which included anti-malaria work from 1916 to 1954, was centred in the International Health Board (which operated first independently and then as a division of the Foundation) and was a complement and stimulant to both business and government programmes for over fifty years.

For the Foundation the work of these medical men, "for whom there were few political constraints", was often the gentle opening wedge to be followed by interventionists in other areas. In a recent book a vice-president of the Foundation has written: "... medical and public health men paved the way for agriculturalists in South America and Asia. The work of the agriculturalists in turn gives credit to populationists, social scientists and others who follow them."<sup>25</sup>

In China between the wars, public health work was undertaken as part of the effort to stem peasant revolution. Rockefeller support for public health in China included building the Peking Union Medical College, co-operation with the Peking police department to establish a municipal public health station, former Foundation fellows and Foundation representatives to serve as consultants and administrators of both national and provincial health programmes, and support for Jimmy Yen's anti-communist community development programmes which included a public health component.<sup>26</sup>

The Rockefeller Foundation's worldwide support for medical research,

public health, and medical education was pursued through institution building, international fellowships, international conferences, international professional journals and co-operation with the League of Nations and other international organisations. This support led, gradually but surely, not only to improved health services but to the development of a world system of co-operative interpersonal and interorganisational relationship based on common ways of dealing with health problems. The system facilitated the rapid distribution of new knowledge and techniques that fell within these methods. The common way of dealing with health problems which the Foundation was fostering reflected that developed earlier in the American South — a focus on the germ theory of disease rather than on poverty itself and co-operation with established governments and a focus on a few elite institutions and individuals who then dealt with the larger population.

This second set of examples suggests that the development of modern public health around the world has been both stimulated and limited by the needs of an expanding private enterprise economy. Control of diseases, many spread by the imperialists themselves, turned out to be necessary for the success of their economic projects both for technical reasons of labour availability and for political reasons of propaganda to counter peasant revolt. Because the aim of business expansion was mainly private profits, support for health care was limited to efforts which had an impact on profits. Only as the understanding of the dependency of localised control (e.g., for some plantation or mine) on wider control grew and only as the revolt of indigenous peoples against colonial exploitation expanded so did the concern with public health. These circumstances which point to such direct links between decisions on support for public health and political considerations in the colonial period suggest that some such relationship is also likely to be found in the post-colonial period.

#### HEALTH AND COUNTER-REVOLUTION IN THE POST-WORLD WAR II PERIOD

We have seen that in the period before WW II one of the primary objectives of business in developing public health services, whether in the United States or the Third World, was in gua-



ranteeing itself a productive labour force. In the Post WW II period this approach became institutionalised in the developed world as an integral part of the Keynesian productivity deal.

In response to the rise of working class organisation and power in the West, especially in the United States in the 1930s and 1940s, Western business was faced with a situation in which it could no longer force wages down through periodical economic cycles. So with this possibility blocked and future wage increases a certainty, economists sought ways of incorporating this trend into a strategy for growth. The solution was found by institutionalising the union contract and by imposing a productivity deal that tied wage increases to productivity increases. By such a link not only would wage gains not outstrip productivity gains but the struggle for higher wages would become the motor of growth, driving business to modernise and innovate in order to insure rising productivity and stable profits.<sup>27</sup>

With the development of productivity the key to growth and to social stability through higher wages, it was only one step to seeing the investment in education or public health or medical care as a productivity raising investment in "human capital".<sup>28</sup> Unlike the colonial perspective this view when applied to the Third World saw public health as integral to a *generalised* development approach based on a more health and thus a cheaper and more flexible worldwide labour force. This appears to have been one of two basic concepts which made public health a key element of the foreign aid and local development plans of the 1950s and 1960s in the Third World.

The second idea was the continued use of public health, not to increase the ability to work *per se*, but to increase the willingness to work. That was public health as a propaganda tool in the struggles with labour and peasant unrest. And it is as much on this basis as on the more subtle "development" approach that we find the decisions to support anti-malaria and other similar public health campaigns being based.

Perhaps the most spectacular and best known use of health care to fight revolution and to win friends for the capitalist world was the dramatic and highly publicised work of Dr Tom Dooley with refugees in Vietnam and Laos. While serving as a US navy doctor in Haiphong in 1954, Dooley

helped administer the migration of North Vietnamese Catholics into the South — a migration which was later discovered to have been planned and propagated by the CIA. Later, Dooley joined the "Vietnam Lobby" and, with his books and speaking tours, helped enlist public opinion on the side of Diem and increased American intervention in Southeast Asia. Dooley then worked with the International Rescue Committee (IRC), one of the most important groups in the Lobby, to launch a new programme of medical aid in neighbouring Laos. In Laos he carried the campaign to save the people from Communism right up to the border of China where the people had "no allegiance to the Central government" and where "just right for the Commie treatment".<sup>29</sup>

This kind of work in isolated areas served no immediate role in providing a healthy labour force. It was rather a first step in persuading the people to identify more with the government rather than with the guerillas. Since Dooley's death in 1961, this effort to win the peasants with health care has continued under the auspices of a variety of private organisations including the IRC, the Catholic Relief Service, CARE and the Thomas A Dooley Foundation.

Considerably less spectacular than this work with the isolated and homeless, but no less dedicated, were the continuing efforts of international businessmen. These included both concern for the health of Third World employees and a broader interest in encouraging local governments to develop general public health services in order to legitimise the existing order.

One of the expressions of business interest was a conference on "health problems of industries operating in tropical countries", held in 1950 at the Harvard School of Public Health. The conference grew out of a discussion between Dean James Simmons and Winthrop Rockefeller (who was working at that time in the foreign department of the family's Socony-Vacuum Oil Company).<sup>30</sup> The representatives of some twenty-three multinational corporations were brought together with public health experts to discuss the danger of Communism and to exchange information on how health work could be brought to bear in the fight against it. In his welcoming address, Simmons

made the focus of the conference clear to all:

Powerful Communist forces are at work in this country and throughout the world, taking advantage of sick and impoverished people, exploiting their discontent and hopelessness to undermine their political beliefs.

Health is one of the safeguards against this propaganda. Health is not charity, it is not missionary work, it is not merely good business — it is sheer self-preservation for us and for the way of life which we regard as decent.

Through health we can ... prove, to ourselves and to the world, the wholesomeness and rightness of Democracy. Through health we can defeat the evil threat of Communism.<sup>31</sup>

Three years later, in a similar conference, American businessmen were still deeply worried about the political implications of public health care. Although they might bicker over the respective merits of government programmes and private health plans, the political concerns behind their determination to support health care had not changed. "I think that no matter what happens", declared the assistant vice-president of United Fruit Company, "a provision of adequate public services to the populations in which our companies operate will not lapse. My reason is very simple. Good public health is one of the strongest political factors that can be developed".<sup>32</sup>

While private business girded its lions for fighting Communism, the Rockefeller Foundation was in the process of limiting the operational aspects of its health programmes.<sup>33</sup> This reduction stemmed not from a reluctance to continue in the good fight, but because major new resources had entered the field and the Foundation's interests are more diverse. Along with such international groups as the new World Health Organisation (WHO) and the revitalised Pan American Sanitary Bureau, the US bilateral aid programme (under Point Four) included investment in public health. The Foundation's pre-war efforts to stimulate increased government contributions had been successful. Accordingly, its programme could be limited to a few research projects and to the provision of expert advice and initiative to other groups.<sup>34</sup>

Before the Second World War the United States had been signatory to a number of international sanitary conventions and the US Public Health Service (USPHS) had co-operated with



the League of Nations' Health Committee, including the Malaria Commission. The USPHS had also had a number of scattered international projects largely in the Western Hemisphere where it supported the Pan American Sanitary Bureau. At home during the war the USPHS was again motivated to push a vigorous anti-malaria programme in co-operation with the US military in and around training camps and cantonments in the Southern US where malaria was still a problem. The war period also saw increased research for synthetic drugs to replace scarce quinine and a reorganisation of the various American international projects which were brought together and co-ordinated within a more centralised programme under Nelson Rockefeller's Institute of Inter-American Affairs (IIAA).

The IIAA public health programme was part of the overall wartime economic and psychological operations approach to Latin America. The resultant joint programmes with other hemispheric governments carried on projects such as malaria control (which was given top priority), construction of sanitary water systems and the operation of health centres. After the war this kind of work was continued under the auspices of the IIAA and Point Four.<sup>35</sup>

Throughout the early post-war period government public health programmes were intended to lay an important role in fighting social unrest and agrarian revolution. In Europe, the public health activities of the Marshall Plan and of the United Nations' Relief and Rehabilitation Administration were partly aimed at quelling leftist popular fronts. As for the Third World, a 1952 report from the public health division of the American Economic Co-operation Administration's mission to Cambodia, Laos and Vietnam nicely summed up the aims of those programmes:

Today, American public health specialists of all kinds — health officers, sanitary engineers, nurses, laboratory technicians, and health educators — are participating in technical assistance programmes being conducted ... in many parts of the world. These programmes are not only contributing to the welfare of the countries in which they operate, but, through their effect in bolstering the economic and health standards of the participating nations, are aiding in the establishment of stable governments.<sup>36</sup>

The report, which was primarily concerned with describing a trachoma control project in North Vietnam, went on

to explain that in Southeast Asia technical aid "has as one of its primary purposes the strengthening of the democratic bloc of nations". In fact, as the report makes clear, the public health programmes were launched primarily for their propaganda effects in hope of countering France's deteriorating situation in Indochina.<sup>37</sup> Other public health projects in Vietnam included an anti-malaria DDT team which, under the cover of "political neutrality" could penetrate Vietminh zones and demonstrate the government's "interest" in the peasants. Later on when American military intervention in Vietnam escalated, the control of widespread malaria was sought for other reasons. In 1965 for example "the number of [US] soldiers evacuated from Vietnam because of wounds and the number evacuated because of malaria were equal".<sup>38</sup> Among the many other countries in which public health has played a political role were Iran, Thailand and the Philippines.

In Iran, in 1951, Premier Mohammed Mossadegh nationalised the oil industry, breaking Britain's monopoly control. Subsequently, while encouraging an embargo of Iranian oil and refusing Mossadegh's pleas for financial aid, the US maintained a technical aid programme "with malaria control as a major feature". When the Mossadegh government weakened under the economic pressure, it turned increasingly to the Communist Tudeh Party for aid. The CIA organised a successful coup in 1953 which re-established a system of Western control over Iranian oil. That system gave American companies forty per cent of the equity.<sup>39</sup> A government report later said that "qualified non-public health observers" credited "the malaria component of the US technical assistance programme with playing an important role in tipping the scales to the side of the free world".<sup>40</sup>

In Thailand, an MSA summary of its public health work during the 1950s reads: "An improvement in public health is a major means of bringing the Thailand government closer to the people and thus of building political stability." The report goes on to point out that most of the work was concentrated on the poverty-stricken Korat Plateau, an area where "Communist agents work to best advantage and where the tendency to political disaffection is greatest".<sup>41</sup>

In the Philippines, a number of public health programmes were launched after the establishment of the first Mu-

tual Security Agency (MSA) mission from the US in 1951. Anti-malaria campaigns conducted during the struggle against the Hukbalahap guerillas made "possible colonisation of many previously uninhabited areas". In this way, by facilitating the offer of land to guerillas they "contributed greatly to the conversion of Communist-inspired Huk terrorists to peaceful landowners".<sup>42</sup>

Just recently the Philippines has provided one of the most striking examples of a rapid shift from the expansion of malaria control to the *withdrawal* of control for political reasons connected with social conflict. In response to the failure of an offered development programme to buy off the recent struggles of the Moslem insurgents in Mindanao and the Sulu Archipelago, the government decided in 1973 to stop malaria control spraying on at least one important island in order to help that sickness spread among the insurgent population. "There is lots of malaria down there", the Filipino military commander for the region is reported to have said, "so we have stopped spraying. Sooner or later the rebels will be too weak to fight".<sup>43</sup> When decisions to expand disease control or to contract it are made on the basis of political struggle it is hard not to see either decision as a form of biological warfare.

#### POLITICS OF A SECRET REPORT

The year 1956 was a turning point in American support for the fight against malaria because in that year President Eisenhower decided to throw US financial support behind the WHO world-wide malaria eradication campaign which had been announced the previous year.<sup>44</sup> The official presentation of this decision naturally held it up as another sterling example of the humanitarianism of the US government. The real reasons behind this move were much less altruistic. Eisenhower's decision was based on the results of a secret study undertaken by the State Department in response to a presidential request to come up with new American foreign aid programmes which could help counter the then recent expansion of Soviet aid efforts in the Third World.<sup>45</sup> The "Official Use Only" final report to the President, prepared by the International Development Advisory Board examined the past political uses of malaria control in many countries:

The present governments of India, Thailand, the Philippines, and Indonesia, among others, have undertaken malaria programmes as a major ele-



ment of their efforts to build political strength and combat Communist infiltration.<sup>46</sup>

These countries, the report noted, were recipients of "outstanding assistance" by the ICA. In India, for example, the report quotes an Indian malariologist on the usefulness of the programme in increasing government-peasant contacts: "No service establishes contact with every individual home at least twice a year as the DDT service does unless it be the collection of taxes."

The Board also heard testimony from the Rockefeller Foundation malaria expert Dr Paul Russell. A consultant to the WHO, Dr Russell brought to the IDAB views developed during his many years of work in this field with the Foundation:

Dr Russell pointed out that although malaria is no longer a problem in the US it is of tremendous importance to the American businessmen, as 60 per cent of our imports come from and 40 per cent of our exports go to countries in which it is a problem... In concluding Dr Russell pointed out that a malaria eradication programme was a dramatic undertaking that would penetrate into the homes of people and would benefit the US politically and financially. The sort of aid that comes from the heart and would thereby prove to people of these underdeveloped countries that we were really interested in their well-being.<sup>47</sup>

Profits and counter-insurgency packaged in a humanitarian wrapping — an argument at least as old as the earlier effort to transform the American South.

The American decision to support malaria eradication through an *international* body was perfectly consistent with the IDAB report. The report had explicitly pointed out that the same political benefits from US aid could be obtained indirectly, by channelling funds through multilateral programmes, in those "areas and nations with which the United States is not directly working through the ICA".<sup>48</sup> Moreover, since the multilateral agencies, especially the WHO, were closely interrelated with American private and government programmes, increased funding for the former could only benefit the latter.

There was a unanimity of support for the use of WHO that included private groups as well as the government. This support was co-ordinated outside the government through the National Citizen's Committee for the World Health Organisation. Set up in 1952, the Committee brought together in a series of annual conferences the members of the elite concerned with the use of public health in the Third

World. Typical of these was the National Conference on World Health held in 1959. Organised around the theme "World Health for World Peace" it fielded an impressive list of internationalist speakers: chairman Milton S Eisenhower, then head of Johns Hopkins and director of Freedoms Foundation; Andrew W Cordier, Ford Foundation trustee and executive assistant to the UN Secretary General; Leo Cherne, chairman of the International Rescue Committee and close friend of Tom Dooley; Assistant Secretary of State Francis O Wilcox; Senator Hubert Humphrey, architect of PL 480; and Representative Walter H Judd of the right wing Committee to Defend America and Aid Refugee Chinese intellectuals. Each of these men approached the use of public health from his own particular role in fighting Third World revolution. All were agreed about "the vital part that world health must play in reaching world peace and stability".<sup>49</sup>

These examples from the post-war history of public health and malaria control provide ample evidence that, as in earlier periods, decisions to either expand or contract support for malaria control have been shaped as much and perhaps more by a consideration of political factors as they have by the consideration of welfare or humanitarian concerns.

#### MALARIA AND THE INTERNATIONAL CRISIS

This is the background which we must keep in mind when we examine the current developments in public health and malaria control in India and in the world. And we must indeed remember WHO director-general Halldan Malher's warnings that the malaria situation in the world as a whole has been changing. In the late 1950s and early 1960s at the height of the enthusiasm for development the international public health movement, including WHO, declared that the total eradication of malaria was perfectly feasible technically and should replace the more limited object of malaria control in the world. And in fact, today the WHO has declared over 20 countries and areas to be completely free from malaria — proof of the possibility. In India this shift of emphasis from control to eradication was reflected in the replacement of the National Malaria Control Programme launched in 1953 by the National Malaria Eradication Programme in 1958.

But by the beginning of the 1970s

things were changing rapidly. The social upheavals of the 1960s in both the First and Third Worlds had caused a profound economic crisis for Western business and government. In the First World continuing wage increases which have outstripped productivity gains had shattered the Keynesian productivity deal and created a profits crisis which was increasingly driving business into the Third World. But in that same Third World agrarian revolt, industrial unrest and national liberation struggles in Vietnam, Angola and elsewhere were reducing the investment potential for business simultaneously with the deterioration of conditions in the US, Western Europe and Japan.

A series of crises has shaken up the structure of the global economy. From Nixon's destruction of the international monetary system in 1971, we have passed through the food price crises in the West in 1972, the energy crisis in 1973 and the Third World famines of 1973-74. The traditional structure of a developed first world and an underdeveloped Third World on the periphery of the First is now being changed. Today, with the decline of Britain and the Northeastern US, with the chronic instability of France and Italy, the label of "developed centre" seems hardly appropriate. The rapid development of countries like Iran and Brazil as a result of massive flows of investment capital is also making the label underdeveloped obsolete for some areas and giving rise to a new distinction between the Third (now developing) and Fourth (now lagging behind) Worlds. At the same time parts of the underdeveloped world (now called the Fourth) are becoming more underdeveloped than ever.

What is striking about all these changes is that they are the result of careful, though not always co-ordinated, planning. It has in fact been cogently argued elsewhere that they constitute not an accidental series of events but parts of an emerging strategy by international business interests to deal with their worsening problems of labour control and productivity.<sup>50</sup>

One aspect of this new period of increasing underdevelopment for some parts of the world has been the deterioration of government support for public health. In the once developed areas, like New York city or England, this has taken the form of cutbacks in government expenditure for medical care and the closing of hospitals. In Third World countries it has included decreased priority for malaria control



among other things. By 1969-70 it was obvious that increasing numbers of Third World governments were already backing out of their commitments to malaria eradication and shifting back to an emphasis on control. In 1972 this movement gave birth to a WHO conference with the politically as well as linguistically awkward title of "WHO Interregional Conference on Malaria Control in Countries where Time-Limited Malaria Eradication Is Impracticable at Present".<sup>51</sup> This, of course, is the polite way of saying that in the current conjuncture the resources necessary for the peoples of these countries to be freed from malaria will not be forthcoming either locally or internationally.

But we should also note that in other countries of the Third World especially those becoming major new centres of business accumulation (like Brazil, Iran, Saudi Arabia) etc, malaria control or eradication programmes are being pushed ahead rapidly.<sup>52</sup> Thus, public health may be one aspect among others of the current restructuration of the capitalist world.

At this point, before turning to the recent situation in India, I would like to draw some general conclusions from the preceding historical sketch and suggest a theoretical perspective within which the experiences examined can be most usefully grasped and in terms of which we can think about today.

#### HEALTH AND CAPITALISM

In each of the cases I have examined we find the same phenomenon: public health measures (whether being introduced, expanded, withdrawn or allowed to decline) have played a part in a social conflict. In the South, they appeared at the interface between Eastern business and farmers. In China they appeared during a conflict between peasant revolution and a combination of local government and foreign private philanthropy. In the post WW II period they played a role in numerous struggles between a coalition of government and business on the one hand and rural revolutionaries on the other.

In these conflicts we consistently find on one side the interests of national and international business, represented either directly through company policy or indirectly through business financed philanthropy or business oriented government. On the other we find the interests of a variety of urban and agrarian workers, from the city workers, family farmers and sharecroppers of the American South to the peasants and city dwellers of Asia. In the middle we

find the public health workers — those responsible for implementing the programmes which emerge from the larger conflicts. In the hierarchy of public health those at the top take part in the formulation and design of the programmes and may even contribute to the larger political analysis. At the bottom are the field workers, paid like other waged workers, who carry on the work of producing and repairing the larger working population.<sup>53</sup>

The concerns of agrarian and urban workers might well be defined in terms of a struggle for a better standard of life which includes higher income in exchange for less work. Business on the other hand, has been consistently concerned with the availability of a politically stable and productive work force. This preoccupation of capitalist business and government with public health comes across clearly in this history as a concern with the conditions of labour supply. But as we have seen the supply of labour is no simple quantitative variable. It is rather the conditions of the availability of a labour force willing and able to work in return for an income it finds temporarily feasible and business finds profitable. Nor can this question of supply be restricted to that of labour available for *waged* work.

Whether in the US South, China or post-war Asia, business has sought the stability of both the waged and unwaged parts of the labour force in agriculture. In the South the attempt to develop Southern agriculture involved unwaged family farmers and unwaged sharecroppers as well as waged agricultural labour. The same has been true with respect to waged industrial labour and unwaged peasants in Asia.

This struggle by capitalist business for stability and profits and by various kinds of workers for less work and better income is certainly a struggle between two classes of people: those who are forced to work in order to live and those who achieve wealth and social control through their ability to make others work. It is thus a class struggle—but one in which the "working class" is understood to contain both waged and unwaged elements.<sup>54</sup>

Within this struggle public health programmes like malaria control appear as *death control* programmes. They are the earlier and counterpart of the more recent *birth control* programmes — which together constitute for business the means of obtaining control over population growth and thus over the supply of labour.

In both the history we have looked at and in this more general theoretical analysis of capitalist society we can see that health cannot be defined in abstraction but is defined in practice by each of the classes. For the "working class" (waged and unwaged, factory worker and peasant) health is defined in terms of its ability to live as it wishes autonomously from capitalist imposed work. For the capitalist class "health" of a worker has consistently been defined functionally by his/her ability and willingness to work. A worker who *can* not work is sick and requires medical treatment. A worker who *will* not work is also sick and requires psychiatric treatment, prison or worse.

Now, we have seen that under circumstances where, from business point of view, the poor health of the working class has made it *unable* to work under cost conditions profitable for capitalist investment, business groups have sometimes developed medical and public health programmes to improve the productivity of labour. Historically this has generally been the case within the now developed countries and sometimes the case in the Third World. But we have also seen that these measures must be grasped as a part of a particular kind of *strategy* for dealing with the problem of the availability of labour. This strategy, in which income (including health) is improved in exchange for more work, we may call a strategy of "development". The alternative strategy, in which income is reduced in order to impose the availability of work through deprivation and poverty, we may call a strategy of "underdevelopment". In the material examined here we have seen mainly examples of development strategies which included expanded public health. But we also saw how the withdrawal of malaria control in the Philippines was part of an underdevelopment strategy which followed the failure of an offer of development. More generally there has been the increased underdevelopment of several countries during the present international crisis. History is full of other examples.

In the earlier periods of capitalist growth through original or primitive accumulation, both in the developed countries and in the colonial world, peasants and "primitives" were driven into poverty and off their lands; local handicraft and nascent industrial production were destroyed — all to create an available labour force by enforcing poverty sufficient to force the local



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population to work for capital, whether in the factories of Manchester or the plantations of South America or Asia. But the excessive use of such underdevelopment — of poverty and overwork — in early capitalism led to such production of illness that the very ability of the working class to work was impaired. Capitalist response to this difficulty was for a long time simply to import more workers from the healthier rural labour force. But both the spread of epidemic illness and working class struggle against overwork eventually forced business to adopt the strategy of development of the kind we have seen.<sup>55</sup>

With this perspective, in which we can grasp the historical experience of public health as a moment in the history of the class struggle, let us return to the problem of contemporary India.

#### INDIA, THE NEED FOR RESEARCH, AND THE QUESTION OF WHAT IS TO BE DONE

In a previous article<sup>56</sup> I argued that India has apparently been among those countries where elements of an underdevelopment strategy have been replacing development efforts. If indeed the general failure of the development strategies of the 1960s — the green revolution in the countryside and the industrial policies in the cities — has led to India now being "underdeveloped" in an attempt to impose work discipline through a massive attack on the working class instead of attempting to buy its co-operation with increased income, then such a change in strategy is of momentous importance. An underdevelopment strategy must couple *repression* — smashing industrial struggles, lower agricultural output prices and higher input prices to squeeze the rural working class — with *restructuration* — perhaps a new focus on capital intensive industry with a permanently higher wageless unemployment and/or a new effort at long-neglected land reform to stabilise the rural population on small farms. Certainly the shift from previous policies of expanding malaria eradication to, by default of adequate action, an underdevelopment strategy, which is imposing increased illness on the working class, is consistent with this interpretation. But at the same time clearly more detailed research is called for into the post-colonial history of the Indian malaria programmes and their relation to more general political policies.

In the Philippines malaria de-control has openly been made a part of the government's counter-guerilla campaign in the Southern islands. But by all indications to date there is no such militarily specific aspect to the situation in India, at least not that I know of, although there is certainly a regional specificity which includes some areas of civil unrest.<sup>57</sup> A study of the regional distribution of (1) the resurgence of the disease, (2) government expenditures and policies, and (3) the status of the class struggle would help clarify the politics of the situation in India.

N P Sinha<sup>58</sup> attributes the decline in government action to a shift of emphasis from death control to birth control in the late 1960s. Such a shift undoubtedly took place but I suspect that we must look more at the general policies of the government to understand why the increased work on birth control (which is now culminating in forced sterilisation) was accompanied by a decline rather than an increase in government action on malaria. An historical study that sought out and made clear the political considerations that influenced the development of these programmes would be very revealing. Indian researchers would do well, it would seem, to try and uncover just what was the basis for the inclusion of India in the IDAB report cited above on the use of malaria control programmes to "build political strength and combat Communist infiltration".

It is quite imaginable that the current crisis may mean deepened and prolonged underdevelopment for India just as it may for other parts of the Third World, of Western Europe and of the United States. If it does, then "letting nature take its course" may be just as real with respect to malaria as it has already been with respect to drought in the Sahel and flood in Bangladesh. If this is the strategy in India thought-out or not; if this is the meaning of the rapid rise of malaria in recent years, then the only limits to such policies of neglect will be working class power.

In a period of underdevelopment the demand for public health services becomes primarily a working class demand, especially since the danger of public health hazards like malaria is so closely tied to the more general question of working class income and standard of living. In such a period it is not a question of *persuading* policy makers to change. Nor is it a question of "generat-

ing political will". The only way the working class ever "persuades" business to change or causes its "will" to change is by either giving in to its demands or through the exertion of its own political power to *force* changes.

Malaria, as I mentioned at the outset, is a relatively cheap disease to prevent and its total eradication has been proved possible time and again. Government arguments about insufficient resources for adequate programmes must be judged against these facts and in the light of the current international conjuncture.<sup>59</sup> On the one hand the resources required are not great. On the other, "the spiralling costs of insecticides and anti-malarial drugs and difficulties in procuring them" which have been part of the current inflation and which have increased the resources required, can only be understood within the analysis of the current crisis suggested above. The responsibility for the worsening malaria situation in a country like India thus lies with capitalism at both the national and international levels. At the international level because inflation has been used to undercut working class income almost everywhere, and at the national level because the government has not taken adequate offsetting measures, which are quite within its reach for this particular programme area. There is simply no excuse for allowing the present trends to continue. The same humanitarian arguments with which the political aspects of malaria eradication programmes in the past have been disguised can now be turned against any continued government reluctance to act and used to explain the struggle to reverse current trends.

If it is seen that arguments about limited resources are part of an international strategy of scarcity for the working class, then there is no reason to accept the arguments that improved *rural* health must come at the expense of *urban* health—that is an argument which can only pit urban workers against rural workers. Nor should we blame public health workers for inadequate care when they are understaffed and underfunded. Nor need we accept the increasingly popular argument in capitalist international circles that since business is unwilling to provide the resources necessary for adequate health care, then the only solution is for the poor to emulate the Chinese "barefoot doctors" and provide their own services with minimal governmental support. Whatever its virtues in improving health in China, such an



approach in India would mean the exhausting work of self-managing one's own poverty — a job which free business resources for investment elsewhere and drains the energies of the working class which would otherwise be available for struggle to end that poverty.

The demand must be instead for a transfer of wealth and income from business and the state to the working class sufficient to finance the eradication of malaria. We must be frank and state that in our time *malaria is a political disease*. At some earlier date when its causes and methods of prevention were unknown a government might be excused for inaction. But today it is a disease of the poor whose methods of prevention are indeed well known and are relatively inexpensive. In these circumstances the inadequate application of those methods by capitalist controlled governments can only be interpreted as an attack (by inaction) on the working class. And because the resources involved are small this is one battle which the working class should be able to win.

Linked to this goal are the other broader demands of the class for greatly improved health care in general. These demands must also refuse capital's definition of health as ability to work and instead fight for the beginning of an end to illness producing work itself. The struggle for malaria eradication is only one step in that larger struggle but through it those involved can build their understanding and strength for the broader fight against both development and underdevelopment and for the appropriation of the wealth they have already produced.

### Notes

- 1 N P Sinha, "Malaria Eradication: What Went Wrong?" *EPW*, June 26, 1976.
- 2 WHO, "The Work of WHO, 1975". (Annual Report), WHO Official Records No 229, Geneva, 1976.
- 3 E g, L K Altman, "Malaria Surges in India Despite Vast Drive", *New York Times*, October 6, 1975; also *NYT* March 16, 1969, Sept 18, 1973, July 31, 1974, Oct 28, 1974, May 1, 1975.
- 4 The *NYT* carried the story of the plea by the head of the Indian Council of Medical Research, Dr Coluthur Gopalan, for increased research funding in "India Seeking New Medicines to Combat Revived Diseases", Oct 28, 1974.
- 5 Most of the official reports mentioned below, including those of the WHO, mention these failings.
- 6 Sinha, *op cit*.
- 7 P G K Panikar, "Health Care Deli-

- very System in India: Alternative Approaches", *EPW*, May 29, 1976.
- 8 "Report of the Evaluation In-Depth of the National Malaria Eradication Programme of India", November 1970 (mimeo).
- 9 The pattern of government expenditures through 1973 shows a definite drop in the late 1960s from \$ 25 million (US) in 1962 down to \$ 13 million in 1968. There was a slow rise in 1969 (\$ 15m) to 1971 (\$ 22m). But then despite the continuing spread of malaria there was a renewed drop in 1972 (\$ 21) and 1973 (\$ 14m). WHO, "Development of the Anti-Malaria Programme", Executive Board, 55th Session, Provisional Agenda Item 2.9, 13 Dec, 1974.
- 10 These subsequent reports included the "Report of the National Committee, 1973 and those of the two Committees of Experts in March and September 1974 and the results of the consultative meeting in New Delhi in August 1974. This last meeting was especially submissive to government refusals to expand support. According to WHO reports, it declared the reports of the 1970 In-Depth Team and of the 1973 National Committee "unrealistic" and that "an important resurgence of malaria was unavoidable". It proceeded to "stratify" the country according to endemic levels and to study "which activities might be discontinued, or reduced, with the least damage and what mechanisms should be set up in order to limit mortality and morbidity in case of epidemics which could be expected in large areas". WHO, "Development of the Anti-Malaria Programme" *op cit*, p 36.
- 11 See the reports themselves plus the summaries of factors in WHO, "Development..." *op cit* and in "Review of Malaria Situation in India" (Paper Submitted by the Government of India), WHO, July 1, 1975.
- 12 Much of the historical material which follows in this article is adapted from the author's doctoral thesis: "The Origins of the Green Revolution", Ph D Stanford University, 1975 (unpublished).
- 13 Many of the details of this effort in social engineering are analysed in Cleaver, *op cit*, Chapter III.
- 14 M Boccaccio, "Ground Itch and Dew Poison, The Rockefeller Sanitary Commission, 1909-14", *Journal of the History of Medicine and Allied Sciences*, January 1972.
- 15 *Ibid*, pp 29, 45; Rockefeller Foundation, Annual Report, 1923, p 88.
- 16 R Foskick, "The Story of the Rockefeller Foundation", pp 47-50. ICA Expert Panel on Malaria, "Report and Recommendations on Malaria: A Summary", *Amer J of Trop Med and Hyg*, July 1961.
- 17 Victor Heiser, who worked first with the US Army and then with the Rockefeller Foundation, noted this European attitude in his early work in Asia. Victor Heiser, "An American Doctor's Odyssey", New York, Norton, 1936.

- 18 United Kingdom, "The Fight Against Malaria in UK Dependencies", 1960.
  - 19 A detailed study which summarises and synthesises dozens of earlier studies concerning the impact and costs of malaria on India is that by Lieut-Col J A Sinton, "What Malaria Costs India", Health Bulletin No 26, Government of India, 1956, which is a compilation and condensation of articles written in the 1930s and published in the *Records of the Malaria Survey of India* (Vol V, Nos 3, 4, 1935 and Vol VI, No 1, 1936). Especially interesting is Chapter 4 on "The Financial and Economic Losses" which contains much information on the motivations and extent of anti-malaria work in 20th century colonial India.
  - 20 In 1952 at the beginning of the National Malaria Control Programme the number of cases of malaria in India stood at approximately 75 million and the number of deaths at approximately 800,000.
  - 21 Heiser describes many situations where disease was causing high, sometimes prohibitive, costs to businessmen, pp 37-8, 269, 292, 295-7, 300-1, 449, 455, 456-7. Among the costs of sickness incurred by United Fruit and other companies were: low productivity due to illness, time lost due to hospital visits, excessive housing costs caused by the necessity of keeping more workers than would otherwise be necessary. Edward I Salisbury (United Fruit medical director), "Costs and Returns of Industrial Health Services", *Industry and Tropical Health*, Vol 1, 1950, pp 172-3.
  - 22 John C McClintock, "Responsibilities of Industry for Health of Local Populations Abroad", *Industry and Tropical Health*, Vol II, 4/20-22, 1954, pp 39-42. On the early need for plantation medicine in labour-scarce Hawaii, see Dr William B Patterson, "Plantation Medicine in Hawaii", *Industrial Medicine and Surgery*, Oct 1949, pp 426-7.
  - 23 In 1916 Gorgas headed an International Health Board commission to South and Central America to study the possibilities of a yellow fever control campaign. When he retired from his job of Surgeon General in 1918, he joined the IHB to head their yellow fever work. Rockefeller Foundation, Annual Report, 1920.
  - 24 Quoted in Catherine Lewirth in her, "Sourcebook for a History of the Rockefeller Foundation", Vol 5, p 1272, Rockefeller Foundation Archives, New York.
- Another reason for developing public health abroad was also dictated by self-interest: that of eliminating foreign sources of disease which could contaminate areas, including the United States itself, which had been cleared of dangerous illnesses. The danger to the continental US of the yellow



- fever in Cuba was "one of the principal reasons for our going to war with Spain" according to Dr Victor Heiser, *op cit*, p 34. While this unquestionably overrates the importance of the factor to the men responsible for the decision to go to war, it does reflect a point of view apparently common in the Rockefeller Foundation. Frederick Gates, Rockefeller's business partner and almoner, for example, approved the health work of the League of Nations because, he said, "... it relieves America, and particularly the International Health Board in part from extensive operation among decadent peoples justified in the past perhaps mainly as a protection against international infection". "Philanthropy and Civilisation", Memo to the Foundation board of directors; Gates Papers, (1923) p 19, Rockefeller Foundation Archives, New York.
- 25 Kenneth W Thompson, "Foreign Assistance: A View from the Private Sector", (Notre Dame: University of Notre Dame Press, 1972). Thompson is vice-president of the Rockefeller Foundation.
  - 26 See Cleaver, *op cit*, pp 194-6, 222-5 on Rockefeller support for public health and Jimmy Yen in China.
  - 27 On the Keynesian effort to harness class struggle for capitalist development see Guido Baldi, "Thesis on the Mass Worker and Social Capital", *Radical America*, May-June 1972 and Mario Tronti "Workers and Capital", *Telos*, No 14.
  - 28 The major studies which founded this concept as strategy were those of economists Theodore Schultz, Gary Becker, and Robert Solow. Gary Becker, "Human Capital" (NY, NBER, 1965); Robert Solow, "A Contribution to the Theory of Economic Growth" *QJ of E*, Feb 1956; T W Schultz, "Investment in Human Capital", *AER*, March 1961.
  - 29 The story and importance of Dooley's use of medical care have been analysed in R Scheer, "Hang Down Your Head Tom Dooley", *Ramparts*, Jan-Feb 1965, and more recently in Steve Weissman, "Tom Dooley-CIA", *Pacific Research and World Empire Telegram*, June 1972, which was able to draw upon the CIA material in the "Pentagon Papers".
  - 30 "Current Biography", 1959, p 393.
  - 31 James S Simmons, "Welcoming Address", *Industrial and Tropical Health*, Vol 1, 1950, p 13. During the conference, although the political theme predominated, there was still much discussion of the profitability to private business of supporting both private and public health programmes. "Only as the surrounding populations are protected", the business representatives were told by Dr Fred Soper of the Pan American Sanitary Bureau, "can your groups be truly safe". Dr Soper, who, prior to his job with the PASB, "held top posts in the Rockefeller Foundation's International Health Division", concluded his talk by pointing out the implications of the impossibility of isolated health care: "It is good business", he said, "for industrial concerns working abroad to foment in every way possible the development of local, national and international health services". Dr Fred L Soper, "History and Present Problems", *Industrial and Tropical Health*, Vol 1, 1950, p 95.
  - 32 John C McClintock, "Responsibilities of Industry for Health", *Industry and Tropical Health*, Vol 1, 1954, p 42.
  - 33 During the war, the Rockefeller Foundation had worked closely with the allies in the production and dissemination of both vaccines and techniques.
  - 34 Kenneth W Thompson, "Foreign Assistance" (Notre Dame: University of Notre Dame Press, 1972), pp 38-39.
  - 35 J B Bingham, "Shirt-Sleeve Diplomacy: Point 4 in Action" (New York: John Day, 1953). On the IIAA, see pp 19-23. On Point 4 public health programmes, see pp 82-103.
  - 36 E Braff and W Winklestein, "Field Treatment of Trachoma in North Vietnam", *Public Health Reports*, Vol 67, No 12, December 1952, p 1233.
  - 37 *Ibid*, p 1234.
  - 38 W D Tigertt, "Present and Potential Malaria Problems" in E H Sadum (ed) "Research in Malaria". *Military Medicine*, official J of the Association of Military Surgeons of US, Vol 131, Supplement No 9, Sept 1966.
  - 39 David Wise and T B Ross, *op cit*, pp 110-14. Also, Jerrold L Walden, "Restraining the CIA", in Richard H Blum, (ed) "Surveillance and Espionage in a Free Society" (New York: Praeger, 1972), p 225.
  - 40 International Development Advisory Board, "Malaria Eradication", Special Report to the President, April 13, 1956, pp 8-9. William I Myers Papers, Box 6, 21/2/466, Cornell University Archives. The Rockefeller Foundation had started a "Local Health Service" in Iran in 1950 in co-operation with the Ministry of Health and the Medical Faculty of the University of Teheran which was then taken over by the International Co-operation Administration (ICA) in 1951. Rockefeller-controlled oil companies dominated the five companies in the new consortium which was set up: Standard Oil of California, Standard Oil of New Jersey and Socony-Vacuum (Mobil).
  - 41 Mutual Security Agency, Southeast Asia, 1952, p 51. The complementary roles of public health and agricultural development in Thailand were emphasised by the now famous Griffen Report of 1950.
  - 42 IDAB, "Malaria Eradication", *op cit*.
  - 43 On the development offer see Tillman Durdin, "Drive to Pacify Southern Philippine Moslems Is Begun", *New York Times*, Dec 11, 1972. On the use of malaria de-control see: James P Sterba, "Manila Is Using Malaria Mosquitoes to Fight Rebels", *New York Times*, March 29, 1973.
  - 44 "US Gives \$ 7 million to Malaria Eradication Campaign", *US Department of State Bulletin*, Dec 23, 1957; also Charles H Bell to Harry A Bullis, 8/18/58, p 1, Bullis Papers, Minnesota Historical Society Archives. Better known than the secret IDAB study was the expert panel to study the past and future of American activities in malaria eradication created in 1959 within the International Co-operation Administration which was given responsibility for implementing the new policy. The panel, whose report was written and submitted in 1960, included Paul F Russell who had earlier advised the IDAB and Fred Soper who had participated in the 1950 business/public health conference on public health and communism (see note 18). The panel's report was published the following year in the *Amer J of Tropical Medicine and Hygiene*, July 1961. It provides a useful historical summary of publicly known US policies and programmes to that date.
  - 56 The IDAB was established by Truman to formulate policies for Point Four and was continued under Eisenhower. It was originally headed by Nelson Rockefeller. Rockefeller's wartime international work in the Office of Inter-American Affairs had constituted a pioneering application in government of the lessons learned during the pre-war work of the Rockefeller Foundation. The IDAB was composed of prominent businessmen (e.g. Harvey Firestone, J P Grace), educators (e.g. W I Myers of Cornell), and farm and labour leaders (e.g. H D Newsom of the National Grange, L Mashburn of the AFL). The IDAB, whose importance has been little recognised by scholars, played a vital role not only in formulating general foreign aid policy, but also in specific areas of policy such as the one discussed here.
  - 46 IDAB, "Malaria Eradication", *op cit*, p 8.
  - 47 IDAB, "Summary Minutes", April 13, 1956, Myers Papers, Box 6, 21/2/466, Cornell University Archives.
  - 48 IDAB, "Malaria Eradication", *op cit*, p 10.
  - 49 Harold Ballou, "World Health for World Peace", *Public Health Reports*, Vol 74, No 11, Nov 1959, pp 969-72.
  - 50 See Mario Montano, "Notes on the International Crisis", *Zero-work*, No 1, Dec 1975.
  - 51 WHO, "Malaria Control in Countries Where Time-Limited Eradication Is Impracticable at Present: Report of a WHO Interregional Conference", WHO Technical Re-



- port Series No 537, Geneva 1974.
- 52 WHO, "The Work of WHO, 1975", *op cit*.
- 53 Let me be clear on this point. Although there may be occasional cases of corruption or, more dangerously, of political connivance with government counter-insurgency intelligence forces by the staff of malaria control programmes, I think that we should generally assume, until the contrary has been proved, that public health workers are motivated by humanitarian concern for the welfare of the entire working class (themselves included). We will often find I expect (as in the case of the US IDAB) a situation where top political, business and military leaders (and perhaps some people in higher levels of the health profession hierarchy) will have a fairly clear political conception of how and why they seek to use public health to control the working class. While at the same time, public health workers may be pursuing their own humanitarian ends either in ignorance of the way they are being used, or in spite of it. The point is a politically important one because it suggests

that political efforts to expand public health services will in general be able to count on support from, and should provide support to, public health workers who agree with the politics of such an effort and who will stand to benefit personally from the higher income and less work that better funded programmes can provide.

- 54 For more detailed discussion of waged/unwaged divisions of the working class see Harry Cleaver, "The Internationalisation of Capital and the Mode of Production in Agriculture", *EPW*, March 27, 1976.
- 55 The classic discussion of primitive accumulation and the struggle over the working day is, of course, Karl Marx, "Capital", Vol I, parts VIII, III.
- 56 H Cleaver, *op cit*.
- 57 Among the states where the resurgence of malaria seems to have been particularly strong are Gujarat, Rajasthan, Orissa, Madhya Pradesh, Uttar Pradesh, and Assam. Bernard Weintraub, "India Has Worst Malaria Outbreak since 1953, But Toll Is Low", *New York*

*Times*, May 1, 1975. Also WHO "Work of WHO, 1973", (Annual Report) Official Records No 213, Geneva 1974.

- 58 Sinha, *op cit*.
- 59 Not only is eradication relatively cheap, but to date the per capita expenditures by the Indian government have been very low by international standards. This was already pointed out in the "Report of the Evaluation In-Depth of the National Malaria Eradication Programme of India", November 1970, which showed (p 19) that in 1968/69 Indian expenditures on malaria eradication (in relevant areas) were .054 US dollars (or about five cents) per capita, (this is about .34 rs/capita). Elsewhere it found expenditures of Thailand at 17 cents/capita, Pakistan at 20 cents/capita, Nepal 35 cents/capita, Brazil at 55 cents/capita. According to WHO reports expenditures per capita of protected inhabitants in India have ranged from a high of 6 cents in 1962 to a low of 2 cents in 1973. WHO, "Development of the Anti-Malaria Programme", Report of the Director-General WHO, December 13, 1974, EB 55/WB/2.

## Land Utilisation

### A Note

Ranjit Sau

*The bigger farms, evidence shows, use land less intensively. Why?*

*This brief note examines three possible explanations relying on traditional economic analysis and then proceeds to suggest a new, somewhat unorthodox, hypothesis to account for the behaviour of the big farmers.*

LAND is not a timeless, static concept. The 350 million acres of cultivated land that India has is as good as 1,050 million acres, for instance, if it is used three times a year. That is to say, it is the degree of utilisation which determines the effective amount of land resource of a country. In India, however, the intensity of cropping declines as farm size rises. In a sense, then, big farmers are holding back the growth of India's land endowment.

On an average the index of cropping intensity in India now is 1.18; in 1960-61 it was 1.15. It means that over four-fifths of the net sown area produces only one crop in a year. Table I gives the data by farm size for seven states. Clearly, the bigger farms use land with less intensity. The question is: why? One can cite three possible explanations relying on traditional economic analysis. After reviewing these three, we shall proceed to suggest a new, somewhat unorthodox, hypothesis to

account for such behaviour on the part of big farmers.

#### I

A common explanation for the low cropping intensity in big farms is that the farmer is presumably not interested in income beyond a certain level; so he leaves the land idle after that 'bliss' level of income is reached. It is as if there is a rectangular hyperbola: as farm size goes up the cropping intensity declines keeping the total income constant. But there are plenty of facts to contradict this premise that the farmer aspires for a fixed quantum of income and no more. The rich farmers' lobby, for example, continuously presses for higher prices. Besides, all too often it is the big farmer who also engages in various non-agricultural activities such as usury, trading, or investment in local transport like buses and trucks. Certainly, he is not

content with his farm income alone.

Another type of explanation runs very much along the lines of a textbook on microeconomics. A big farmer usually supplies a sizeable part of the local market; so he faces a downward sloping demand curve for his product. To that extent he enjoys a degree of monopoly power. And just like the monopolist in the textbook he tends to restrict output. It is not easy to ascertain the grain of truth in this proposition. However, at most this hypothesis can explain why the big farmer restricts the output of a given crop; but it cannot show why he does not produce the second crop. A 'monopolist' farmer may limit the production of rice in the hope of a better price; but why should he not follow up the rice crop with, say, potato?

The third kind of reasoning is that the big farmer may not find multiple cropping at all profitable.<sup>1</sup> This point



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## REMEMBER

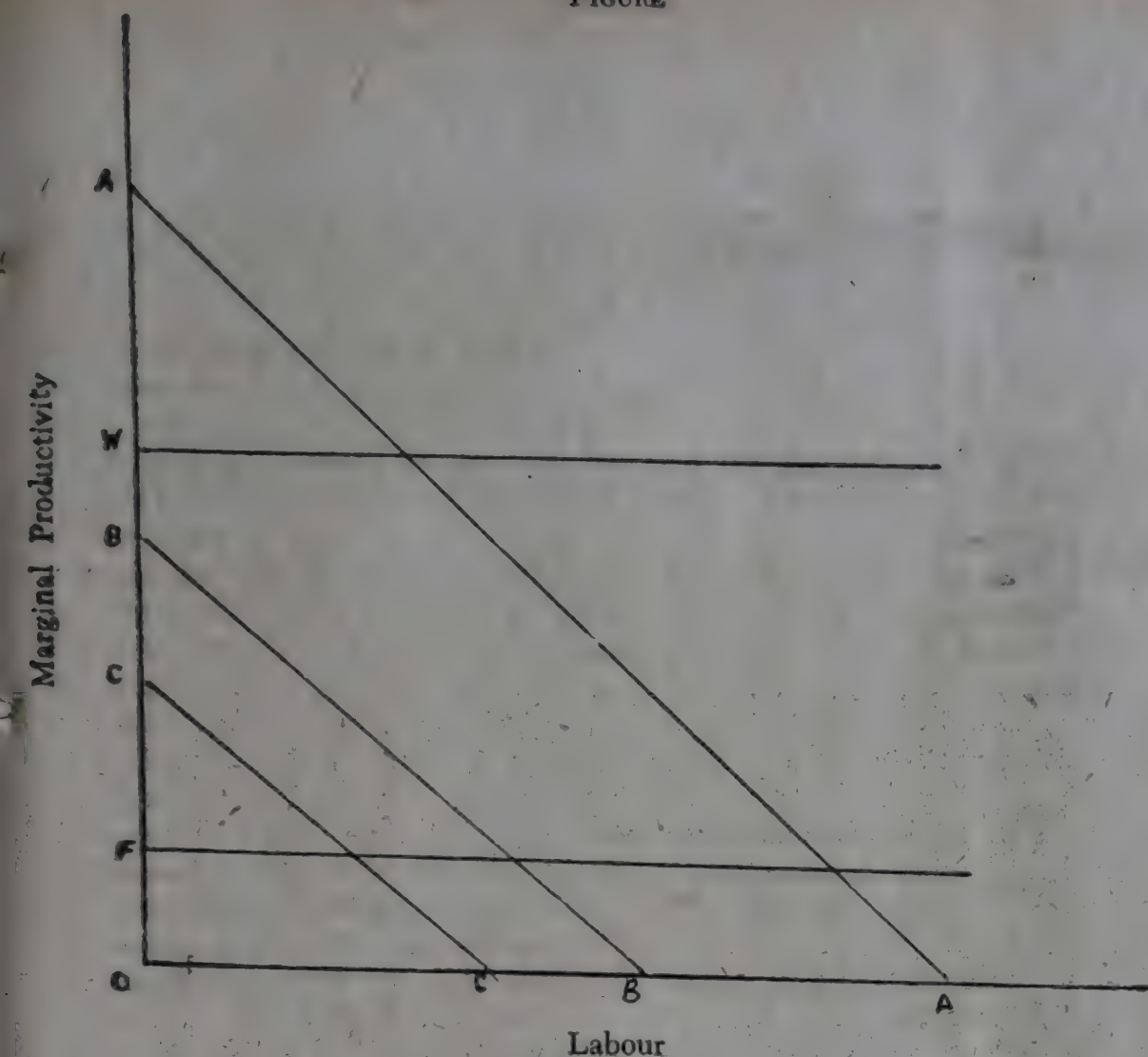
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due amount of advance-  
tax in time attracts  
penal consequences.



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FIGURE



can be elaborated as follows. In the Figure let AA, BB and CC be the curves of marginal productivity of labour in the three consecutive crops, respectively. The big farmer employs hired labour at wage rate OW. Clearly, the second and third crops are not profitable for him to produce. A small farmer,

on the other hand, cultivates land solely or mainly with his own family labour, whose wage rate is practically zero, or, say, OF in the Figure. In this case the small farmer would raise three crops on his land, while the big farmer would leave his land idle after the first crop.

Whether or not profitability drops to zero in a big farm after the first crop can be tested by empirical observation. *A priori* it seems that the reluctance of the big farmer to do multiple cropping cannot be fully ascribed to such a phenomenon. Availability of water is a major factor in agricultural productivity. In an interesting study P H Prasad observes that big farmers do not care to make use of irrigation facilities beyond one season. Table 2 gives the data on inter-season use of irrigation water by size group of farms in the Kosi canal area. Assuming that the irrigation potential remains the same in both *kharif* and *rabi* seasons (and that the larger the *kharif* irrigation size of a household, the larger too is the size-group of owned land to which it belongs), Table 2 shows that big farmers drastically curtail the scale of their operations after the *kharif* cultivation, whereas with water being equally available the profitability of agriculture is not likely to diminish very much in the meantime. So the zero or negative profitability of subsequent crops on a big farm does not appear to be a tenable hypothesis to explain the lower intensity of cropping as farm size rises.

## II

It is our contention that the big farmer has a multiplicity of channels of profit-making. He cultivates land with hired labour, lends money to

TABLE 1: CROPPING INTENSITY IN INDIA

Farm Size, in Ascending Order	Uttar Pradesh 1966-67	Punjab 1967-68	Orissa 1967-68	Maha- rashtra 1967-68	Tamil Nadu 1968-69	Assam 1968-69	Rajasthan 1971-72	
							Participant	Non- Participant
1	140	151	148	119	170	134	172	132
2	137	143	133	112	165	130	133	124
3	144	138	128	110	172	123	125	102
4	136	120	129	107	167	118	—	—
5	122	—	119	106	135	111	—	—
All farms	133	129	128	111	155	120	134	115

Note: (a) Cropping intensity is measured by the ratio between gross cropped area and the net sown area.

(b) '—' means not applicable.

(c) Class intervals of farm sizes as in col 1 above, differ from state to state as follows: U.P. (Muzaffarnagar district), (1) below 7 acres, (2) 7-11 acres, (3) 11-17 acres, (4) 17-25 acres, (5) above 25 acres; Punjab: (1) below 10.0 acres, (2) 10.0-17.5 acres, (3) 17.5-25.0 acres, (4) 25 acres and above; Orissa: (Cuttack district), (1) below 2 acres, (2) 2-3 acres, (3) 3-5 acres, (4) 5-9 acres, (5) 9 acres and above; Maharashtra (Ahmednagar district): (1) below 10 acres, (2) 10-17 acres, (3) 17-26 acres, (4) 26-40 acres, (5) above 40 acres; Tamil Nadu (Thanjavur district), (1) below 2.5 acres, (2) 2.5-5.0 acres, (3) 5.0-7.5 acres, (4) 7.5-14.0 acres, (5) above 14.0 acres; Assam (Nowgong district) (1) below 4.5 acres, (2) 4.5-6.0 acres, (3) 6.0-8.0 acres, (4) 8.0-10.0 acres, (5) above 10.0 acres; Rajasthan (Udaipur and Chittorgarh district): (1) below 5 acres, (2) 5-15 acres, (3) above 15 acres.

(d) The Rajasthan farms are classified according to whether or not a farm participates in the programme of high-yielding varieties of seeds of wheat and maize which ushered in the so-called Green Revolution.

Source: For the first six states, the "Studies in the Economics of Farm Management", respectively of the corresponding years, The page references are as follows. UP, 63; Punjab p 23; Orissa, p 55; Maharashtra, p 105, and Assam, p 57. For Rajasthan, S S Acharya, "Green Revolution: Farm Income Distribution", *Economic Times*, December 12, 1975.



TABLE 2: INTER-SEASON USE OF IRRIGATION WATER BY SIZE-GROUP OF FARMS IN THE KOSI CANAL AREA, BIHAR

Kharif Irrigation Size-Group (acres)	Rabi Irrigation to Kharif Irrigation (per cent)
0—2	102.43
2—5	66.38
5—10	57.11
10—20	54.29
Over 20	36.50
All sizes	65.88

Source: P H Prasad, "Limits to Investment Planning", in Ashok Mitra (ed), "Economic Theory and Planning", Calcutta: Oxford University Press, 1975.

small farmers and agricultural labourers at usurious rates of interest, engages in trading in foodgrains and other agricultural products, and brings industrial goods from town to the village market.<sup>2</sup> All these *four* modes of extracting profit are exercised by him throughout the year in a certain 'optimal' sequence; and cultivation of land appears on his agenda only for a brief period; at other times of the year his land remains fallow. This is briefly our hypothesis to account for the decline in cropping intensity as farm size rises.<sup>3</sup>

A year may be conceptually divided into three periods. The big farmer cultivates land in period 1. After the harvest, small and middle farmers sell their output at a low price; the big farmer therefore finds it profitable to buy up the grain at that price, to be sold later in the year at a substantial margin of profit. It is well known that despite the government's procurement operations in foodgrains, private traders still handle about two-thirds of the marketed surplus. And an overwhelming bulk of the sales of output by small and middle farmers takes place within the village itself.<sup>4</sup> Thus, in period 2 the big farmer invests his money in purchase of the last season's crop. Cultivation of his land now could be profitable, but not as much as trading in grains. At any rate, money having flown into the hands of small and middle farmers, the big farmer then seizes the opportunity of selling urban industrial goods to them. So in period 3 he engages himself in another kind of trading, namely, sale of goods from the town in the rural market. The three different modes of extracting profit are resorted to by him in three periods consecutively. As for the

fourth one, namely, usury, it could be a year-round exercise for him with seasonal ups and downs.

The criterion of *relative* profitability thus induces the big farmer to leave his land idle in periods 2 and 3. The small and middle farmers cannot afford to do that, simply because they do not have enough money to invest in trading; they have no other alternative but cultivation of land.

It is now understandable why the big farmer does not produce more than one crop on his land. But, one may wonder, why does not he lease out the land in periods 2 and 3? Here a number of factors are involved. First, the small farmers may not have the complementary wherewithal that is necessary for raising the second and third crops in wide tracts of agricultural land in India leased in from big farmers. Secondly, the big farmer himself may be afraid to lease out much of his land for a part of the year, lest it should be occupied by the tenants for the entire year and then for an indefinite period. In other words, security considerations may require that the land is kept fallow rather than let out for few months of the year to small farmers.

### III

If our analysis so far is accepted then a few important policy conclusions would emerge therefrom. The multiplicity of the modes of profit-making implies that the big farmer has the option to choose an 'optimal' mode in each period. So long as this choice is available to him, and the profitability of trading being as high as it is, he is not likely to increase the intensity of cropping in his land, even if some marginal inducements are provided.

The big farmer's four modes of profit-making, as cited above, partly reinforce and partly contradict each other. The big farmer's usurious loan to the small farmers ties up the latter as a seller of agricultural output to the former and also as a purchaser of industrial goods from the same. And yet, to the extent the small farmers get impoverished in the process it limits their supply of agricultural product and thereby reduces their demand for industrial commodities. To take another example, should the big farmer's profit from trading in foodgrains suffer a decline in the wake of a good harvest, it may at the same time lead to a higher income for

small and middle farmers, and thus improve the market for trade in industrial goods from which the big farmer may now reap a bigger profit. In this complex ensemble of multiple modalities of profit making by the big farmer, agricultural production cannot but stagnate, or at best grow at a snail's pace.

There is a possible way out from this impasse. The top 5 per cent of rural households in India own about 40 per cent of agricultural land which comes to 150 million acres. This 150 million acres of land is used with a very low intensity by the big farmers; most probably it is cultivated for one crop only, and left idle for the rest of the year. Should it be leased out to landless labourers during the time when it is otherwise left unutilised by big farmers, a major breakthrough can be achieved in Indian agriculture. There are some 10 million households of landless agricultural labourers in the country. If 150 million acres of land are thus distributed to them for cultivation of second and third crops each household would get 15 acres. And with due support from the government in terms of credit for inputs, this programme would enable the landless agricultural labourers to rise far above the so-called poverty line.<sup>5</sup>

### Notes

- 1 In this category also belongs the argument that a big farm is more likely to have some inferior type of land whose productivity is extremely meagre after the main season of cultivation.
- 2 See Ranjit Sau, "Indian Economic Growth: Constraints and Prospects", Calcutta: Orient Longman, 1973, p 19.
- 3 National Council of Applied Economic Research, "All-India Rural Household Survey", Vol III, pp 36-37, gives the incomes of rural households from various sources. For households up to the income class of Rs 1,201-1,800, all-India total incomes from crafts, business and profits rise along with those from agriculture; however, the ratio between the two declines. At least it indicates that the bigger farmers derive a substantial amount of income from trade and other similar activities.
- 4 See Ranjit Sau, "Small Farmer and the Market", *Economic Bulletin for Asia and the Pacific*, December 1975; and also "Economic and Social Survey of Asia and the Pacific, 1975".
- 5 Sau, "Indian Economic Growth", pp 57-59.





COMPANY MEETING

# I.T.C. Limited

**Chairman, Shri A. N. Haksar's statement  
at the Sixtyfifth Annual General Meeting  
on Thursday, 26th August, 1976.**

## A. Introduction

On behalf of the Board of Directors I welcome you to the 65th Annual General Meeting of your Company. While thanking you for your presence here today, I would like to apologise, in advance, for restricting the hospitality on this occasion in consonance with national policy in this regard.

To begin with, I would like to express your Company's pride in and support of Governmental measures as well as the declaration of Emergency, as a result of which, there have been very substantial gains to the Nation and the public. Containment of inflation remains an outstanding achievement of 1975-76. Not only were prices held, but there was an actual decline in prices by 6% during the year. The financial discipline that has been introduced makes possible the better utilisation of available resources in support of priorities; it has also provided a meaningful thrust for more efficient operations in all spheres. Above all, the Emergency has focussed attention on the need for disciplined conduct of personal and public life, and made poignant, the need for each of us to contribute to the well being of our country through conscientious hard work, and more work, putting the Nation ahead of ourselves. In this Nation-building endeavour and the economic and other programmes enunciated for this purpose, I would like to reaffirm your Company's unflinching support at all times.

Shri D. J. Weaver and Shri R. C. Burns retired from the Board in December 1975 and July 1976 respectively. On behalf of the shareholders and the Board, I would like to express my thanks to them for their valuable services throughout their tenure with the Company and wish them all the best for the future.

Once again ITC was the recipient of awards and tributes in recognition of creditable performances in various sides of its activities. To cite just two:

1. ITC was awarded the Government of India trophy in November

1975 for outstanding export performance in the field of export during April 1972-March 1973.

2. ITC received Government's National Family Planning Award for the best performance under the Nirodh Marketing Programme for 1973/74.

## B. Corporate Results-Review

The report of the Directors, which is with you, will indicate that the Company has completed another successful year of operations. During the year under review, the Corporate Turnover reached Rs. 360 crores and the profit before Tax was Rs. 9.43 crores, both of which are the highest so far achieved. Whereas the cigarette business remained dull in keeping with the static situation in the industry resulting from the continued imposition of heavy excise duties which I will deal with later, significant contributions were made by the leaf tobacco ILTD Division and the Printing and Packaging Division towards these results.

## C. Consumer Satisfaction—Production—Inflation—Excises

In a world which saw spiralling prices and in which high rates of inflation have become almost universal, the handling of this pernicious illness successfully by our country and Government is no mean achievement; some consider it incredible. However, we cannot rest on our laurels and we support Government's continued vigilance on this front.

In continuation of this success on the inflation front I would like to submit, once again, the imperative need to take a fresh look at Excise Duties. In this context, the Honourable Finance Minister's comments during the 1976 Central Budget Speech and the setting up of the Jha Committee under the stewardship of Shri L. K. Jha are most welcome moves.

While it is right that equilibrium be maintained between investment, production and consumption, it is equally true that higher productivity, more employment and better utilisation of

all resources—those already invested and those to be invested—can only flow from higher production supported by expanding demand within the prevailing circumstances of purchasing power. Furthermore, reasonable stability in prices for the betterment of the public as a whole, with larger employment on the one hand and inevitable increases in costs of certain inputs such as energy (etc.) on the other can, perhaps, best be achieved by lesser Excise Duties, with the Exchequer Revenue being augmented through a wider and deeper base of consumption, particularly in the rural areas; thus making a virtue of our very large population that needs to be contained with and radically contained for the future.

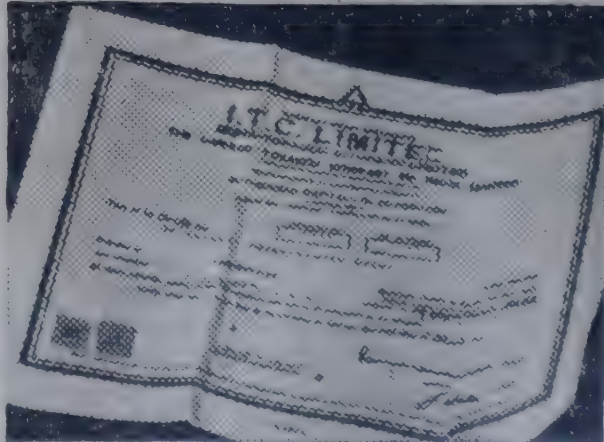
## D. The Management of Diversified Activities—Developments—Progress

The theme of my speech last year was "The Management of Change" which has been a fundamental characteristic of the Company over recent years. Change, to enable progress, change to grow from within based on self-reliance, and to be increasingly Nation-oriented. To this end, Change has been designed towards integration with the country by subserving the National interests whereby the shareholders could obtain their just reward in the longer term for the risks taken by them and contributions made. This year I would like to report to you on the Company's diversified activities, the developments that have taken place and the progress made.

### 1. Indianisation

The final phase of dilution to bring foreign shareholding down to 40% through a disinvestment of Rs. 3.80 crores by the overseas shareholders has been under active consideration, and discussions with the Government. Subject to this final clearance, which it is hoped will be shortly available, the dilution should be completed be-

40% today—60% Indian shareholding shortly.



fore the close of 1976, thus removing ITC from the group of "FERA Companies" to enable it to look to a bright



ter future as an "Indian Company". ITC already has over 40,000 shareholders. By this process of dilution, which started as recently as 1970 when foreign shareholding stood at 94%, it is possible that it will have one of the largest number of shareholders in the private sector in the country. For this major change, thanks are due to the progressive approach, foresight and, indeed, enlightened understanding of the overseas shareholders.

## 2. Foreign Exchange Earnings

Turning to the export performance of your Company, I am pleased to report that the foreign exchange earnings reached an all-time record of over Rs. 31.00 crores in 1975/76. It is gratifying to note that your Company is in the forefront of the national export drive. Every endeavour will be made to match this performance during the current year and, hopefully, there should be further progress in the coming years contributed largely by increased non-traditional earnings arising from the Hotels, Foods and General Exports Divisions.

## 3. Traditional Smoking Tobaccos and Cigarettes—India Tobacco Division

The gross turnover of the India Tobacco Division from smoking tobaccos and cigarettes increased from Rs. 313 crores to Rs. 321 crores, but the net turnover (excluding Cigarette Excise Duty) declined as a result of the increased imposition of Cigarette Excise Duties. The Budget of 1976 once again ushered a further increase in Excise Duties with only a marginal reduction in the lower-middle prices categories; the ninth successive increase in Cigarette Excise Duties since 1968. As a result of these rapid and substantial doses of increasing taxation the cigarette industry has been virtually static for 8 years and only approximately 50/60% of the existing installed capacity is being utilised. On the contrary, empirical evidence points to the fact that substantial increases in Exchequer Revenues do take place without an increase in the rates of duties through a broader based demand and no additional burden on the consuming public. Furthermore, as much as 80% of the Excise Duty on tobacco products is accounted for by cigarettes although they represent around 25% of the tobacco usage in the country. I would like to plead once again that the Government take a more pragmatic approach to giving relief to the cigarette industry as increasing revenues will not be jeopardised, as there is the need for a growing domestic base to support larger exports of leaf tobacco and as it would be only right that the burden of reve-

nue from tobacco be more evenly spread between the various products. The need for such relief, which will also enable better utilisation of available capacity, is most urgent. In spite of these severe difficulties the Division's trading results were maintained at a satisfactory level, and credit for this lies in the managerial action taken to minimise the effects of inflation through product innovation and a reduction in operating costs.

The Division's marketing operations progressed further with the growth of GOLD FLAKE and CAPSTAN. WILLS FILTER continued to do well while WILLS VIRGINIA FILTER emerged as the largest selling filter tipped cigarette in India. Three other filter tipped brands—WILLS FLAKE KING SIZE, WILLS FLAKE REGULAR SIZE and BRISTOL are also moving up fast along with BERKELEY.

I would like to reiterate once again that there is substantial scope for the growth of the cigarette industry without harming any other tobacco product given a more realistic approach on Excise Duties.

## 4. Leaf Tobacco—ILTD Division

Turning now to Leaf Tobacco, you will recall that I have always referred to The Indian Leaf Tobacco Development Co. Ltd. as a sister concern in the past. ILTD has been operating in India as a 100% U.K. owned Company Branch Operation. I am very happy to report that, as a result of amicable discussions with ILTD U.K., and the subsequent permission given by the Central Government, your Company was able to purchase, with effect from 1st April 1975, the net assets of ILTD in India and this is the first year in which the ILTD Division has functioned as a part of ITC. This acquisition has added very considerable strength to the operations of ITC in the tobacco business by providing it with an efficient raw material base as well as the very substantial expertise and technology that has been developed by ILTD over many years, not only in tobacco, but in the field of agriculture as a whole.

ILTD has been the pioneer of the leaf tobacco business in India and of this Division's turnover of over Rs. 47 crores, as much as 52% or around Rs. 25 crores is in exports. ILTD Division is in constant touch with all the major tobacco customers in as many as 20 different tobacco importing countries. Whereas the exports of tobacco have been increasing in recent years, competition from countries such as Brazil, Korea, Thailand has been

increasing where, not only is there no duty on exports, but instead governmental subsidies are available in several instances. It is to be hoped that with the imperative need to improve further on our tobacco exports Government will give consideration to the timely removal of the Export Duty on Tobacco so that India does not lose out its pre-eminence amongst tobacco exporting countries in the International market.

The ILTD Division is closely involved with the development of tobacco in India and vigorous new development work is going on in Karnataka State and in light soil areas in Andhra Pradesh.

## 5. Printing and Packaging Division

The Printing and Packaging Industry continued to face a general slump in business during 1975/76. In the wake of the packaged commodities orders, the credit squeeze and other anti-inflationary measures to better equate demand with supply, there have been vigorous attempts on the part of the basic user industries to cut down inventories, resulting in depressed demand. In spite of the very severe difficulties, the Printing and Packaging Division was able to make a very reasonable and improved contribution to Corporate Profits largely through judicious purchases of its major feedstock and by very strict control of its overheads expenditure coupled with continuing improvement in productivity. The demand from basic users has recently been showing an improving trend and this, together with diversifying customers and products, should enable the Division to improve further on its performance in the current year with increasingly meaningful contributions to the Corporate good.

## 6. Hotels Division

Your Company's entry into the tourism and hotel industry started with the opening of Hotel CHOLA in Madras



in September 1975. The results achieved by the end of March 1976 were well above earlier expectations. Perfor-



mance since April this year, despite the slack season, has been very creditable, and with indications of growing tourist traffic to the South, which process can be accelerated through removal of certain constraints, occupancies should improve further in the coming months. The earlier snags that were inevitably encountered in a new industry and venture have now been overcome, and during this, the first full year of its operations, it is expected that results should be genuinely satisfying. Considering ITC has entered the industry without any collaboration, either foreign or domestic, the credit for these results goes to the management of the Division and Hotel CHOLA who have collectively endeavoured to inject a new dimension in the Industry by taking pride in developing a hotel concept that is rooted in the soil of our country and is truly Indian.

I am also very happy to report that there has been an advance on our earlier expectations relating to the completion of Hotel MUGHAL in Agra which has opened this month and started receiving guests. Hotel MUGHAL will be fully operational by October in respect of all its facilities. Indian travel agents and foreign tour operators who have visited the site are greatly impressed by its unique concept and design and have been already making bookings of an order which augur well for the future. Between Hotels CHOLA and MUGHAL with a full year of operations of both, the Hotels Division is likely to be in a position to make a contribution to Corporate Profits having fore-shortened the period of construction, gestation and running-in. Construction of Hotel MAURYA has not only commenced but is in full swing to enable the hotel to open in the winter of 1977. The Pacific Area Travel Agents Conference is being hosted in Delhi in January 1978 and your hotel is expected to reap considerable benefit from the international exposure that it will receive.

Your Board of Directors place considerable confidence in the future of this Division which has grown rapidly, as the Division and ITC have been fortunate in collecting a group of hotel expertise and management which, although it may not be the largest, is certainly both individually and collectively already considered by others to be about the best in the country.

#### 7. Foods Division

Turning now to the Foods Division, I am happy to report that during 1975/76 exports were around Rs. 5 crores. Your Company's brands—

PENINSULAR and CHEF—have established for themselves a reputation of high quality and are in good demand in overseas markets, particularly Japan. During 1975/76 this Division consolidated its activities, the fleet of fibre glass motorised trawlers was augmented by two, two trawlers have now been taken on lease and two Mexican trawlers are likely to be received before the close of this year. With this growth in the trawling fleet concurrent steps are in hand for expeditious construction and commissioning of new processing plants for marine products.

Subject to the vagaries of the "commodity market", it is expected that export earnings will double themselves over the next two years. The gestation period can be considered to have finished in 1975/76 and, during the current year and in years ahead, the Foods Division—another new venture—should be in a position to provide its due return to the body Corporate.

#### 8. General Exports Division

The General Exports Division exported a wide range of products including cigarettes, paperboard, surgical dressings, light engineering goods, insulators, garments and leather. In order to put the activities of this Division on firmer ground in the longer term it has been decided to be more selective in the future in order to establish product uniqueness. New growth areas have been identified and reliable production bases are being developed to achieve the objectives of longer term growth, profitability and higher stable exports.

#### 9. Bhadrachalam Paperboards Ltd.

Your Company is promoting B. P. Ltd. for manufacturing quality carton board and printing cum educational papers with an investment of 33% of the equity in this new venture which is in the core sector. The letter of intent was converted into a licence some time back and substantially effective steps have already been taken. The project is located in a backward district of Andhra Pradesh. An effective and enthusiastic group of management, including the necessary expertise and technology, has already been built up and the final financing plans are being pursued. This will be the first project of its kind in the industry in the private sector in many years. The progress to date gives confidence in the future of this project and, therefore, for the investment being made by your Company.

#### E. Tribute to the Most Valuable Asset—People—Employees

In keeping with our philosophy and

practice of seeking active participation of employees and the Unions as a part of long standing Industrial Relations Policy, we welcome the scheme of Workers' Participation and training of apprentices and look forward to its success in the light of our many years of experience.

During the year under review our employees—management and non-management—continued to extend their co-operation in meeting the difficult situations faced including the gestation pangs of our new activities and we were able to introduce several measures for cost reduction at all our Units. To date, new Long Term Agreements have been reached at 10 Marketing Branches and 3 Production Units in the ITD—India Tobacco Division—and, as in the past, Annual Bonus and monthly incentive payments continue to be linked to Productivity. ILTD Division also concluded a Long Term Agreement covering nearly 18,000 workers and annual bonus has been linked to productivity for the first time.

I should like to take this opportunity of thanking all employees in the organisation, those in our traditional business as well as new entrants into our diversified activities, for their very laudable efforts and loyalty and assure shareholders that the Directors will continue to seek and value the co-operation of the people who make this Company a growing one for, to them all, goes the credit of such success as we may have achieved both in our traditional and newly diversified activities.

#### F. Conclusion—the Future

Finally, I would like to take a look at the future. I have always believed that the well being of your Company is linked to the prosperity of our country. Today, India is economically stronger than it has ever been before and this healthy economy of ours is poised for greater and faster strides in the future. Our foreign exchange reserves position is not only sound but improving every day. Such a situation can only augur well for the future. At the same time, your Company has largely overcome the initial hurdles of diversification and weathered the very heavy burdens of early gestation in its new diversified activities. It is now moving to a period of consolidation in its new directions. With God's grace and luck, that is inevitably necessary, I cannot but look to the future of our country and, therefore, your Company with confidence.

This does not purport to be a report of the proceedings of the Annual General Meeting.



# POLYCHEM LIMITED

## Statement of the Chairman, Shri Ramdas Kilachand

THE following is the Statement of Shri Ramdas Kilachand, Chairman for the Twentieth Annual General Meeting held on 1st September, 1976.

To the Members,

I have great pleasure in welcoming you all at this Twentieth Annual General Meeting of the Company.

The Directors' Report and Statement of Accounts for the year ended 31st March 1976 are enclosed.

### MARKET SITUATION AND FUTURE OUTLOOK

The adverse market conditions referred to in my last year's statement continued during 1975-76 as a result of which the Styrene Plant and the Polystyrene Plant had to be operated at less than 60 per cent of their rated capacities. Several representations had been made last year to the Government by the plastic raw material manufacturers and plastic processors and some relief was expected during the year in naphtha price and excise. Unfortunately, no relief was granted and the market remained dull throughout the year. However, though there has been no reduction in naphtha price, the subsequent reduction in excise duty on plastics from 56 per cent to 40 per cent *ad valorem* announced in the current year's budget is expected to revive the market for plastics. Reduction in naphtha price can help reduce plastics prices and give impetus to the market, provided no power cuts are effected.

Production and sales of Potable Liquors and Industrial Alcohol increased significantly leading to a higher annual sales turnover during the year under report.

Cost reduction programme have therefore been intensified in all units through process improvements, energy optimisation and stricter inventory control. If the present price stability prevails and if the food crop is as good in 1976-77 as in the last year, the purchasing power of the people should markedly improve thus generating a spurt in the demand for consumer durables like air conditioners, fans, automobiles, refrigerators, radio receivers, television sets etc, which are the major users of polystyrene. If this happens, a better result for next year can be expected.

The promulgation of national emergency a year ago has given a sense of

direction and discipline to the country's economy and it is hoped that the tem-



Shri Ramdas Kilachand

po of industrial and agricultural revival will be maintained.

### NEW PROJECTS

Steps are in progress to implement the 2,000 tons per year capacity Acrylonitrile Butadiene Styrene Plastics (ABS) Project and the 5,000 MTPA capacity Vinyl Acetate Monomer (VAM) Project for both of which the Company holds letters of intent from

the Government. When these two projects are completed, the Company's operations will get widely diversified. During the past two years, the Company offered turnkey services for chemical projects abroad, particularly in South East Asia and Africa and the proposals are under consideration of the overseas clients.

### RESEARCH AND DEVELOPMENT

The Research and Development unit is doing research on thermoplastic copolymers and pesticides. The recognition extended to it by the Government has been renewed for three more years with facilities to import vital chemicals and apparatus for advanced research work.

Before concluding I wish to place on record my appreciation of the sincere work put in by all employees of the Company.

RAMDAS KILACHAND  
Chairman.

### Registered Office:

7, Jamshedji Tata Road,  
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Bombay 400 020.

Dated 3rd August, 1976.

"This doesn't purport to be the proceedings of the Annual General Meeting".

### Transformers and Electricals Kerala

TRANSFORMERS AND ELECTRICALS KERALA (TELK), established by Kerala government and Kerala State Industrial Development Corporation in collaboration with Hitachi of Japan is offering to the public 8,55,052 equity shares, of Rs 10 each, to raise a part of the finance required for its Rs 5.64-crore expansion programme aimed at stepping up capacity from 1,080 MVA to 3,000 MVA of transformers per annum and also to manufacture 400 kV equipments. TELK is one of the two manufacturers in India producing power transformers, current transformers, on-load tap changes, and bushings, upto 400 kV. It has supplied extra high voltage transformers upto 220 kV to almost all the states in India and also exported some transformers to Tanzania, Malawi, and Cambodia. The company has almost completed the project and the entire work is expected to be over by

December. In fact, it commenced manufacture of 400 kV transformers in December last and achieved a production of 1,500 MVA in 1975-76. The gestation period for the expansion is, therefore, almost nil; nor is there any overrun in the project cost. The company has a good record of sales and profits. During the past five years, its sales expanded from Rs 2.35 crores to Rs 7.57 crores and gross profit from Rs 17 lakhs to Rs 1.08 crores. It paid a dividend of 6 per cent for 1974-75 and 12 per cent for 1975-76. In view of the likely greater stress on high voltage systems in future, demand for transformers of 400 kV ratings is expected to rise at a faster pace in the coming years. Already the company has on hand orders worth Rs 30 crores to run for two-and-a-half years. The subscription list for the public issue is to open on October 4.



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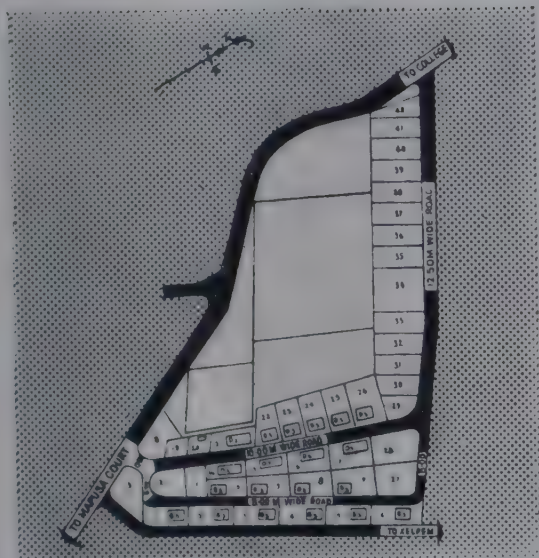
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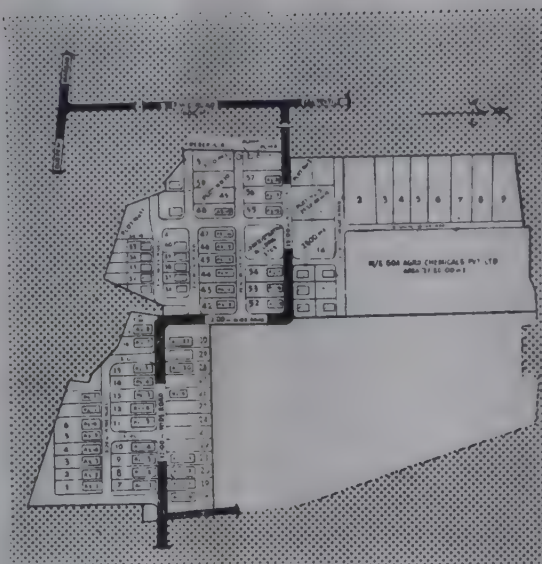
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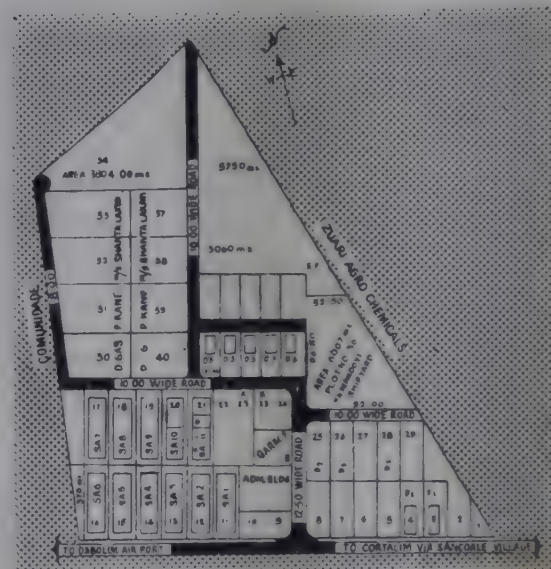
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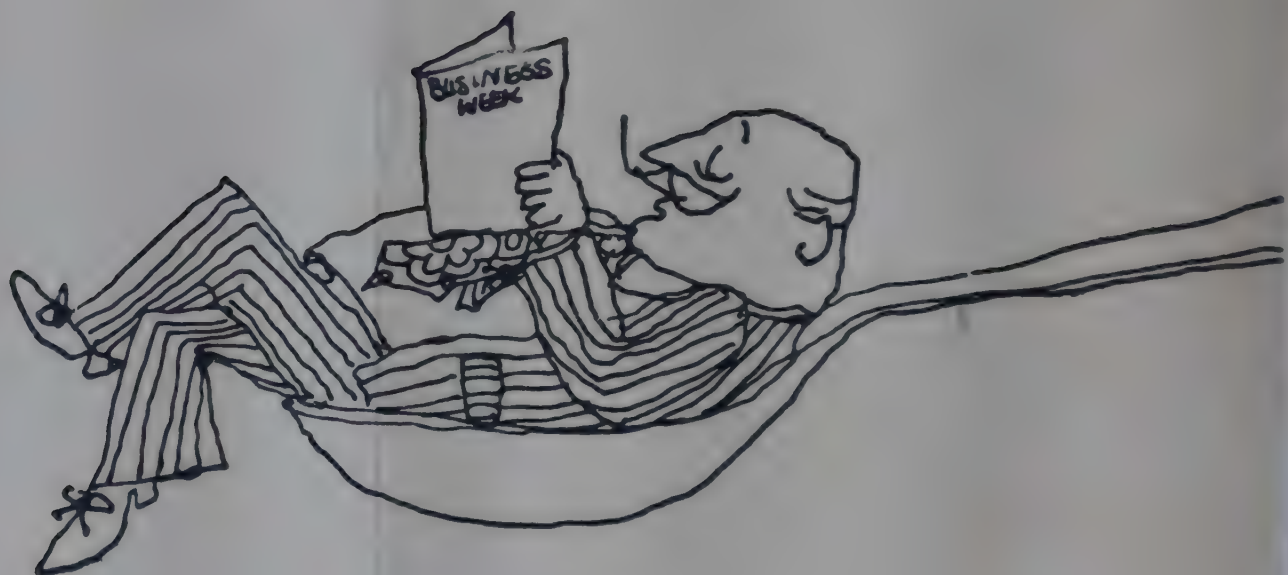
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# Mao Tse-tung

PRACTICE — that is the key to an understanding of Mao Tse-tung. To stress the importance of practice in the world-view of a Marxist-Leninist might seem emphasising the obvious, for Marxism-Leninism is above all concerned with actual social change, with the effective transfer of power from one class to another, with the ongoing evolution of man's production relations from a primitive pastoral and agricultural economy to a socialist society, and to the eventual elimination of commodity production, and the whole structure of class divisions. But the inevitability, as well as the historical compulsions that Marx noted as aspects of this evolutionary progress of human society also needed a revolutionary catalysing agent, which is the communist party. And it is here that practice becomes relevant, not merely in any pietistic liberal sense — 'one should practice what one preaches' — but in the sense that a revolution can only be a revolution in practice.

It is impossible to sum up the richness and comprehensiveness of the contribution of Mao Tse-tung to Marxism-Leninism in the space of a brief comment; but some aspects of it might be noted. The recognition that revolution in a backward and poor country like China called for an alliance of the working class and the peasantry — that while the revolution would be led by the former, the latter would be its main force — is a major contribution of Mao Tse-tung to revolutionary theory and practice. The hegemony of the industrial working class and the proletarian ideology and party was, of course, historically inevitable for the socialist revolution, but Mao realised that in a predominantly feudal country the principal contradictions were in the countryside which was where, therefore, the revolution had to begin. The countryside would surround and engulf the city. This conception of the revolution not only determined the actual course of the Chinese revolution but has also profoundly influenced post-revolutionary developments in that country.

Secondly, and following from this, was Mao's continuous emphasis on mass participation in the revolution. "The people, and the people alone, are the motive force in the making of world history"; "The masses have boundless creative power"; "The masses are the real heroes, while we ourselves are often childish and ignorant"; these are not slogans nor is it cunning demagoguery, but form the very core of Mao's understanding of the revolutionary process, of the practice of revolution. "From the masses, to the masses"; what does the slogan mean? "This means, take the ideas of the masses (scattered and unsystematic ideas) and concentrate them (that is, through study turn them into concentrated and systematic ideas), then go to the masses and propagate and explain those ideas until the masses embrace them as their own, hold fast to them and translate them into action, and test the correctness of these ideas in such action. Then once again concentrate ideas from the masses and once again go to the masses so that the ideas are persevered in and carried through. And so on, over and over again in an endless spiral, with the ideas becoming more correct, more vital and richer each time." Even the communist party was not above the masses; it was not merely to be the leader of the masses, but was also to be led by them. That was the meaning of the famous *tatzipao*, 'Bombard the Headquarters'. Ten years later, nobody can say that the CCP has not emerged the stronger for that bombardment.

In emphasising that class struggle does not end with the formal capture of State power by a communist party, Mao was following Lenin. One of the most explicit statements of Mao on the ongoing nature of class struggle has been recorded by Andre Malraux, in his "Anti Memoirs": "The truth is that if the contradictions due to victory are less painful than the old ones, luckily they are almost as deep. Humanity left to its own devices does not necessarily re-establish capitalism, but it does re-establish inequality. The forces tending towards the creation of new classes are powerful ... Khrushchev seemed to think that a revolution is done when a communist party has seized power — as if it were merely a question of national liberation ... Lenin was well aware that at this juncture the revolution is only just beginning. The forces of tradition he was referring to are not only the legacy of the bourgeoisie ... It isn't simply a question of replacing the Tsar with Khrushchev, one bourgeoisie with another, even even if it is called communist."

Finally, and in a sense, leading from the above, Mao's uncompromising hostility to revisionism. Mao raised fundamental questions concerning the nature of socialist revolution, the relevance of class struggle, the efforts needed to build a communist society. For, it is not enough if the productive apparatus of a



society is owned by the State; it is not even enough if a revolution is made under the leadership of a communist party. Mao always quite frankly acknowledged that the Chinese revolution had not solved all the problems inherited from the Old Order. While the bourgeoisie has been overthrown, and even defeated, there has not been a corresponding replacement of bourgeois ideology. On the ideological level, the defeated classes still have major powers and are controlling new positions. The question is: How to strip them of their power, how to establish the hegemony of the proletariat, not merely as a class, but as an ideology? For, a class — the working class — does not truly become dominant unless it has made its ideology dominant. Mere destruction of private ownership of the means of production is not enough. As Lenin said, it is not until power is won that the struggle begins.

Speaking of Stalin, another great revolutionary leader of our times, so uncompromising a critic of 'Stalinism' as Issac Deutscher had observed that Stalin had put into practice a fundamentally new principle of social organisation which, no matter what happened to him personally, or even to the regime associated with his name, was certain to survive, to fertilise human experience, and to turn it in new directions. Such is even more the case with the achievements of Mao Tse-tung; and it is among that class of great revolutionary statesmen — Lenin and Stalin — that Mao Tse-tung will be counted.

## Planning Commission

### Falling in Line

DEVELOPMENTS in the first two years of the Fifth Plan — especially the sharp rise in prices and the cuts effected in public sector investment in the attempt to curb aggregate demand and control inflation — had, of course, rendered the draft Plan, prepared three years ago, out of date. However, going by newspaper reports of the principal changes now made in the draft, it appears that the Planning Commission, instead of intervening decisively to reassert the goals of long-term planned development which have been obscured by short-term economic measures, has quietly accepted the logic of recent developments in the economy and reworked its projections for the five-year period by and large on the assumption that things will continue as they are.

Take, for instance, the reported scal-

ing down of targets in many core sector industries like coal, steel and cement. This, it might appear, was the natural thing to do in the light of the 'surpluses' of these products that have emerged recently. It is, however, the consistently low levels of investment extending over more than the last 10 years which are responsible for even relatively small increases in the production of coal, steel, cement and other items immediately coming up against the problem of lack of demand. The whole exercise of giving final shape to the Fifth Plan would have made more sense if, instead of chopping and changing production targets in line with the current state of demand, the Planning Commission had addressed itself to the problem of breaking out of the low-investment/lack-of-demand/low-growth circle.

As things are, exports appear the only means of sustaining current levels of output in a number of industries; indeed, more and more is being heard of the need to export even foodgrains. In his Walchand Hirachand Memorial Lecture delivered in Bombay in July, the Deputy Chairman of the Planning Commission had made out a very convincing case against the pursuit of export-led growth. But does the Planning Commission have an alternative strategy to offer?

Take, again, the reported decision of the Commission to significantly raise the private sector's share of the Plan outlay. What is the rationale of this change except that it fits in with recent trends in the economy? In the last many years, while public sector developmental outlays have been tightly reined in, all manner of steps have been taken to induce investment in the private sector with little regard for the relative priority of the areas or industries where the investment takes place. What is particularly strange in the context of the plea of lack of resources for public sector investment is that the bulk of the private sector investment induced in this manner has been financed out of the resources of public sector financial institutions. All this has not only distorted the pattern of industrial investment and production but has also resulted in the creation of industrial capacities which are unusable — given the demand for consumption goods generated by the highly unequal distribution of income and the demand for investment goods resulting from low levels of investment. Here again the Planning Commission appears to

have trimmed its sails to the prevailing winds.

## Pharmaceutical Industry

### No Drugs for the Poor

FACED with criticism about the orbitant prices of essential medicines the pharmaceutical industry has been apt to reply that the prices at which medicines are sold by chemists, even if it is admitted that they are rather high, do not really affect the poor who, not, after all, buy medicines prescribed by private doctors but depend mainly on government hospitals and dispensaries to whom, the industry claims, it supplies medicines in bulk at prices which are much lower than those charged by retail chemists. In the industry is not above suggesting subtly that what it is doing is to subsidise the poor at the expense of the better-off; the relatively high 'market' prices of medicines make possible the supply of cheap medicines to the poor through government hospitals.

The industry's argument is tenuous on more than one count. In the first place, with the very limited coverage of our public health service it is certainly not true that the poor or even the majority of them, are able to get medical treatment and medicines at government hospitals and dispensaries. One has only to spend half an hour at a chemist's shop in one of the poorer localities in any city to get an idea of the number of under-fed, under-clothed people who nevertheless are forced — thanks to the prescriptions blithely written out by doctors, brainwashed, or even bribed, by pharmaceutical companies' 'medical representatives' — to buy the most expensive medicines sold under the names of this or that US, Swiss or German multinational company.

That apart, it is not a fact that the pharmaceutical industry supplies medicines in the required quantities to government hospitals at specially low prices. The study of the S. S. Jang, Willingdon and Irwin hospitals in Delhi — the first two under the government of India and the latter under the Delhi administration — cited in the report of the Comptroller and Auditor General (Union Government: Civil) for 1974-75 throws very interesting light on this. The main sources for purchase of medicines by these three hospitals are the Medical Stores Depot at Delhi, the firms of DGS and D rate companies, and the open market. Of these, in 1974-75 open market purchases accounted for fully 64 per cent



TABLE

Item	Unit	Excess of Open Market Price over DGS and D Rate (Per Cent)
<b>Safdarjang Hospital</b>		
Aspirin	1,000 tablets	150
Mysoline	1,000 tablets	78
Cottonwool absorbent	Packet of 400 gms	58
Normal saline	Bottle of 540 ml	20
<b>Willingdon Hospital</b>		
B Complex	1,000 tablets	114
<b>Irwin Hospital</b>		
Analgin	1,000 tablets	62
Plaster adhesive zinc oxide	7.5 cm x 5 metres per dozen	90
Prednisolone	1,000 tablets	40
Di-iodohydroxy quinoline	1,000 tablets	81
Acetyl salicylic acid	1,000 tablets	120

total expenditure on medicines by the three hospitals taken together; individually, the percentage of open market purchases was 57 for Safdarjang, 59 for Willingdon and 83 for Irwin. What this degree of dependence on the open market means in terms of the prices paid by the hospitals for medicines is brought out by the comparison made by the Comptroller and Auditor General of the open market prices actually paid by the hospitals and the DGS and D rates at which the companies were supposed to supply certain drugs. The results of the comparison are given in the Table.

Even the proportion of direct open market purchases by the hospitals does not fully reflect the extent to which they use medicines bought at high open market prices; for, the Medical Stores Depot, Karnal, from which the hospitals purchase medicines, itself buys a part of the supplies it makes to the hospitals from the open market. The proportion of open market purchases to the total value of drugs bought by the Depot varied between 19 per cent and 26 per cent in the years from 1972-73 to 1974-75.

The Comptroller and Auditor General made a study of certain medicines purchased by the hospitals from the open market even though they were on DGS and D rate contracts and, of course, paid much higher prices as a result. Of 12 such items on which extra expenditure of Rs 5,000 or more were incurred in 1974-75 on account of their having to be bought in the open market, in all except one case the pharmaceutical companies which

had agreed to supply the medicines at the DGS and D rates either failed to or refused to effect supplies. In one case, even the public sector Indian Drugs and Pharmaceuticals refused to supply the medicine in question on the plea that a revision of rates was pending.

Expenditure on medicines by the three hospitals forms a relatively small part of their total expenditure. In the period 1972-73 to 1974-75 it varied from 23 per cent to 25 per cent for Safdarjang hospital, 18 per cent to 23 per cent for Willingdon hospital and 16 per cent to 21 per cent for Irwin hospital. And in the case of the Safdarjang and Irwin hospitals the proportion in 1974-75 was lower than it was in 1972-73 though, as the Comptroller and Auditor General points out, "the cost of medicine has been rising consistently". The relatively small expenditure by the hospitals on medicines means that those who are treated at these hospitals, as out-patients or in-patients, are expected to buy a part of their requirements of medicines from the open market.

The pharmaceutical industry thus derives a double benefit by refusing to supply medicines to government hospitals and dispensaries at the DGS and D rates. In the first place, they force the hospitals to buy medicines in the open market at much higher prices. Second, since the hospitals' budget for purchase of medicines is limited, larger purchases from the open market mean that they are able to supply smaller quantities of medicines to patients.

And since the hospitals cannot supply the prescribed medicines in the required quantities, the patients are — including those who because of their poverty are supposed to be eligible for free treatment — are forced to purchase these medicines from private chemists at the high open market prices.

The Comptroller and Auditor General's findings in regard to the three Delhi hospitals thus cast grave doubts on the pharmaceutical industry's claim that it meets the needs of the poor for medicines at specially low prices through the supplies it makes to government hospitals and dispensaries. On the contrary, these findings seem to suggest that by denying supplies at lower prices to the hospitals, the industry forces both the government hospitals as well as the poor who seek treatment at these hospitals to buy a large part of their requirements of medicines at the regular open market prices.

## ***Southern Africa***

### **Sharpening Struggle**

ALL expectations that the riots in the South West Township (Soweto) of Johannesburg, which flared up in the middle of June last, would be quickly brought under control, have been belied. There has been no let-up in the continued confrontation between the African people in the ghetto 'townships' and the South African police and military forces. By official count, 176 people had been killed and over a thousand wounded in the Soweto clashes last June. After a brief lull, the clashes have been resumed, and since the beginning of August, there have been almost continuous incidents, not merely in Soweto and other townships in and around Johannesburg, but in the other black townships of Cape Town and Durban.

The riots have invariably followed a pattern; mass boycott of work by the black workers which has undoubtedly hurt the economy; arrests of the suspected leaders and 'instigators of mischief'; protest marches by the blacks to the centre of the cities; police firing, riot, and more black people left dead and wounded. The cycle has been repeating itself in a number of townships, most of them not even names to the world at large till the black people started making themselves heard — Tembisa, Katlehong, Sibasa, Oogies, Mohlakeng, Weenen, Middle-



September 11, 1976

burg, New Brighton, Dobsonville, Alexandra, Pietersburg, Dareytoo. The casualties have been, even according to official admission, heavy; over 300 killed since June.

The white racist regime is becoming increasingly more suppressive. The police minister, Jimmy Kruger, said recently, referring to the African people, "He [the African] knows his place, and if not, I'll tell him his place". Quite consistent with this promise, the detention powers enjoyed under the Internal Security Act — it is strange how repressive measures and institutions always tend to have similar-sounding titles, be it the notorious Internal Security Act in South Africa, or the Senate Internal Security Sub-Committee of the US — the powers to arrest without charge or trial, which formerly applied only to Transvaal province, have now been extended to cover the whole country. Of course, the Internal Security Act is only the latest of the repressive laws, for over and above everything else, there is the Suppression of Terrorism Act, an umbrella wide enough to cover under its ambit every kind of opposition to the regime.

The intensification of black opposition to the repressive practices of the regime are obviously related to the current developments in southern Africa, which, however much the apartheid regime wishes, cannot but affect South Africa. Despite the last-ditch stand for God and Christian values and against atheistical communism that is being publicly adopted by the illegal white minority regime in Rhodesia, it is clear that the regime is on its last legs, unless of course its agony is prolonged by some kind of a compromise that is even now desperately being attempted, between the United States, South Africa, Britain, some moderate and 'acceptable' leaders among the Zimbabwe nationalist groups, and of course, some leaders more acceptable to these moderate black nationalists than Ian Smith. Henry Kissinger is once again about to embark upon one of his diplomatic shuttles, and a compromise might yet be worked out.

One of the favourite expressions of the Western powers about the prospects in Southern Africa nowadays is: "Majority Rule and Minority Rights". But what is at stake in South Africa is majority rights, which when once

assured will automatically be followed by majority rule. What the riots since the middle of June have highlighted — and not for the first time — is how majority rights are being denied in South Africa. The cruelties and absurdities of apartheid are self-evident, but what is perhaps not so self-evident is the way in which the system contributes to the accumulation of the surplus value generated by black labour which under apartheid — denied of voting rights, residence laws, reservation laws, work permits, denial of property rights, and a host of related rules and regulations, all perfectly 'legal' — is owned by the whites. Apartheid is slavery, but of a kind which forms the foundation on which a modern, highly industrialised state has been built.

But even this system has been throwing up its sceptics. These doubts however do not spring from any concern for the African people, but from a dim realisation of the fact that apartheid is, in the final analysis, an inefficient way of exploiting African labour; that a much greater surplus could be generated if only apartheid were to be 'humanised'. It has thus become more than ever necessary to reform apartheid, to present an acceptable face of it. The feverish attempts now going on to reach an acceptable settlement on Rhodesia; the rigged up Constitutional Conference on Namibia which concluded recently (without the participation of the South West African People's Organisation which is leading the guerilla struggle there) and agreed on December 31, 1978, as the target date for the 'independence' of Namibia; the forthcoming 'independence' of Transkei, the first of the nine 'homelands' envisaged under the system of apartheid.

All these form parts of a pattern. The most ambitious of these schemes is the creation of the nine Bantustans and their eventual 'independence': Bophuthatswana, Kwazulu, Basotho Qwa Qwa, Lebowa, Vendland, Gazankulu, Ciskei, Swazi and Transkei. Each of these is supposed to be a 'homeland' for one or other of the black ethnic groups. When these homelands become 'independent' under the benevolent dispensation of South Africa, the black people currently considered to belong to these various ethnic affiliations (even those who, as a conse-

quence of long belonging to an industrial working class, might have shed their tribal identities) would automatically become citizens of their respective homelands, and would also cease to be citizens of South Africa. According to the SIPRI publication, "Southern Africa: The Escalation of a Conflict", it was estimated that 38 per cent of all the blacks lived in reserves in 1968; by 1970 this figure had risen to 47 per cent. When the scheme for moving Africans from white areas to Bantustans is completed, over two million will have been resettled.

The official rationale for this undertaking is that it is best to separate the four main racial groups — white, coloured, Indian and Bantus — into separate jurisdictional compartments. On the face of it, the purpose, when achieved, would seem the logical culmination of the system of apartheid. But in reality, the whole scheme is nothing but a thinly disguised attempt to reduce the proportion of black people in the extensive areas of the country designated as white areas, without depriving these areas of black labour. However, even working under the inhuman system of apartheid, a politically informed, active, conscious labour force has begun to emerge as a class. This is demonstrated by the unity and the effectiveness of the boycott by the black workers of Johannesburg last month, when more than 60 per cent of the black workers stayed out in protest against the arrest of student leaders.

The homelands which are supposed to evolve into 'independent' Bantustans are designed precisely to thwart such a trend towards the emergence of a multi-racial, South African identity wherein sections of the conscious working class might even think in terms beyond narrow nationalism. Hence the encouragement to tribal nationalism and exclusivism; hence the pressures to learn Afrikaans, a burden which moreover impinges upon English, the lingua franca of the black people, especially of the urbanised working class; hence the elevation of tribal chiefs to positions of ceremonial authority; in short, a deliberate policy of compulsory retribalisation and denationalising of the black people.

But unfortunately for the present rulers of South Africa, even their ideological allies — not to speak of history — are ahead of apartheid.



Mr G D Birla said today that India would become the most powerful country in Asia within the next 10 years. There was stability in the government, there was right thinking and, whether at the Centre or in the states, all wanted the country to march forward, he said.

*The Hindustan Times*, September 6

The Union government's export policy was "excellent", Mr J R D Tata, industrialist, said here [Calcutta] today.

*The Times of India*, September 5

Mr Orville L Freeman, chairman of the Indo-US Businessmen's Advisory Council, has said that American firms are interested in investment opportunities in the whole range of industries in India. He is of the opinion that the current budget and the new policies initiated by the Indian government are steps in the right direction, but there could be more of this "productivity thrust".

*Financial Express*, September 7

The government of India may have to arrange for the export of some crops which have been purchased largely as a price support measure. This was indicated here [Bangalore] today by the Union agriculture minister, Mr Jagjivan Ram.

*The Times of India*, September 4

India will be in a position to export rice in the next three to four years, the Union minister of state for agriculture, Mr Annasaheb P Shinde, said here [Hyderabad] today.

*Financial Express*, September 9

National Seeds Corporation (NSC) has launched a well co-ordinated campaign to boost export of seeds in different parts of the world.

*The Economic Times*, September 7

The offtake of steel in the last couple of months has been much less than anticipated ...

*Financial Express*, September 3

The industrialist, Mr J R D Tata, said on Saturday that reduction of excise duty on steel was being considered by the government. He suggested that the retention price of steel be increased either by a rise in the sale price or by a reduction of excise duty.

*Business Standard*, September 5

Raw just prices have tended to fall below the statutory minimum level fixed by the government because market arrivals have exceeded purchases by the Jute Corporation of India and the jute mills.

*The Statesman*, September 9

The Jute Corporation is facing a financial crisis as a result of heavy outstandings from the industry on account of raw jute supplied.

*Financial Express*, September 3

The government has directed the Reserve Bank to provide whatever finance is needed by the Jute Corporation to carry out its price support operations during the current season.

*The Economic Times*, September 9

Revision of irrigation rates will be among the subjects that will be dis-

cussed here [New Delhi] at the two-day meeting of state irrigation ministers beginning on September 10 ... The subsidy by major and medium irrigation projects is estimated at about Rs 130 crores.

*Business Standard*, September 8

Intensive fertiliser marketing drive will be undertaken in 55 more districts this year to broadbase the use of fertiliser ... The declining trend in fertiliser consumption observed during the last two years was sought to be arrested through various measures. The prices have been reduced on four occasions, subsidy was provided on phosphates, and a rebate of 25 per cent in excise duty on higher production was allowed.

*The Times of India*, September 6

Continued closures, retrenchments, lay-offs and lockouts in the jute industry, mainly in West Bengal, have affected at least 37,000 workers (until August 7) according to an estimate of the government.

*The Economic Times*, September 7

The Centre has decided that there would be no relaxation in the Bonus Act for payment of bonus for the accounting year 1975-76.

*Business Standard*, September 9

The Centre feels the identification of bonded labour in various states is not progressing with the desired speed.

*Hindustan Times*, September 7

A socio-economic survey of scheduled castes and scheduled tribes in Karnataka has revealed that more than 50 per cent of them in the rural areas still do not have access to the common village well ... Their living conditions portrayed a life of agony. A majority of them lived in separate colonies, outside the villages well demarcated by a road, or at a good distance away from the villages.

*Financial Express*, September 7

The Soviet Communist Party paper, Pravda, on Friday gave a positive appraisal of the constitutional amendments tabled in the Lok Sabha on Wednesday. A Delhi report in the paper said the amendments reflected the changes that had taken place in India's political and socio-economic life. Their aim was to enhance the responsibility of the citizens to the law, to ensure the interest of the state and prevent the misuse of democratic freedoms to the detriment of national interests.

*The Times of India*, September 5

Mothers and sisters of Maintenance of Internal Security Act (MISA) detenus in West Bengal met the home secretary, Mr B Mukherjee, on Friday. They told reporters that the difficulties in meeting their relatives in detention might be removed next week. They added that they had been assured of this by the government.

*The Statesman*, September 4

Giving the reasons for dissolution of the [Dhubri] Mahkuma Parishad, the [Assam] panchayat minister said that a deadlock in the working of the Dhubri Mahkuma Parishad was created due to the continued absence of Sri Jehirul Islam, the CEC. The Parishad had to

be dissolved as no alternative arrangement was provided in the Assam Panchayati Raj Act, 1972. Asked whether the Dhubri Mahkuma Parishad CEC was detained under MISA, the minister said that he had no direct knowledge but from newspaper report it appeared that the person concerned was held under MISA.

*The Assam Tribune*, September 3

The 57th conference of the International Law Association (ILA), which concluded here [Madrid] on Saturday, has approved a proposal to set up an international human rights sub-committee ... An Indian jurist, Mr Subrata Roy Chowdhury was invited to head the sub-committee.

*Free Press Journal*, September 8

Mr Edward Rosenthal, American Consul in Bombay, called on public health minister K M Patil on Wednesday. Mr Rosenthal who had brief discussions with the minister on the state's policy on family planning, appreciated the bold step taken by Maharashtra to curb the population explosion for the speedy economic welfare of society.

*Indian Express*, September 9

Two states and one Union territory have already fulfilled the targets set for the year for sterilisation.

*The Times of India*, September 9

States lagging behind others in the family planning drive have been asked to wipe out the backlog within the second fortnight of this month .... The period will be observed as 'family planning fortnight' throughout the country.

*The Times of India*, September 8

Prof Arun Donde, president of the All India Primary Teachers' Federation, said here [New Delhi] that prime minister Indira Gandhi had assured that she would look into the complaint that in some states it was being made compulsory for primary teachers to bring cases for sterilisation.

*Indian Express*, September 7

The Central government has prescribed a limit of three children for its employees.

*The Times of India*, September 5

For Babulal, a shoe-maker of Ratanagarh, sterilisation came as a blessing. The incentive money Babulal got for being sterilised was enough to get him back his mortgaged leather sewing machine from a moneylender, which he had pawned for Rs 100 some time ago.

*The Times of India*, September 5

Acharya Vinoba Bhave has called off his anti-cow slaughter campaign and cancelled an "indefinite" fast on the issue, which he had announced would start on September 11, his birthday ... In the signed statement, Acharya Bhave said: "In India, the problem of banning cow slaughter has been by and large solved. The real credit for this is due to (1) God, (2) mother (Acharya Bhave's mother), (3) Mahatma Gandhi and (4) Mrs Indira Gandhi. The first three are in heaven. Indiraji is on earth. Thanks to Indiraji. Ram — Hari."

*The Times of India*, September 9



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conditions, creating the best. These  
thoughts have long since crystallised  
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# It all started with a thought





# Remembering Mao Tse-tung

G P Deshpande

What does a revolutionary commander do? He sees to it that everyone has food to eat, clothes to wear, and books to read. And in order to attain these objectives, he must lead a thousand odd million men in struggle against the oppressors, and bring them to victory....

— Mao Tse-tung  
December 21, 1939.

It is said in the "Cannon of Yaou": After twenty and eight years, the Highly Meritorious one deceased. The people acted as if they were mourning for a father or a mother, ... and upto the borders of the Four Seas every sound of music was hushed.

— Mencius.

THE 'Cannon of Yaou' was, one must say, quite prophetic. Nearly twenty and eight years after the Revolution, the Highly Meritorious one of China has deceased, and for the eight hundred million people of China the mourning must be of the same order as in the "Cannon of Yaou". The greatest or, to put it in Mencian terms, the most Meritorious man China ever produced is no more. Chairman Mao Tse-tung is dead.

It has been a long life. It has been a great life. It is perhaps very unfashionable to say this, but it is still true that had there been no Mao there would have been no Chinese Revolution. Lenin is the only other man about whom one could say the same — although his successors in Moscow would not like the comparison between the great Lenin and Mao. Mao was a bitter critic of the ancient Mencius. Nevertheless, he must in this case accept the Mencian standards of greatness. All change requires the 'Highly Meritorious' people. The sad part of it is that they are so few and far between. Mao Tse-tung was one of them. In our life-time we may not see another.

China is a large country. China is also an ancient country. In changing China, Mao and his comrades changed an enormous landmass. They changed a quarter of humanity. But they also changed a civilisation. The twenty-five hundred year old classics of Confucius and Mencius were rejected. The mandarins became a part of history books. The landed gentry was gone. The Kowtow was gone. Mao made his fellow countrymen see, perhaps for the

first time, that a 'foreign' philosophy was in fact relevant to the middle kingdom. Mao and his comrades brought this ancient society out of its sick ethnocentrism. They made China a modern nation and, for the first time, a member of the international community. A whole point of view of looking at things non-Chinese was abandoned. Mao Tse-tung and his comrades made that possible.

And then there was the Chinese peasant, the poor peasant. For centuries he had been at the receiving end. And he received nothing but insults, poverty, starvation, epidemics, and death. Time and again he had risen against this. Time and again he had brought the dynasties down. But nothing really changed; not for him anyway. Like the clever theoreticians everywhere else, Chinese theorists had a theory too about the fall of dynasties. They coined the term 'mandate of heaven'. It was, in short, the heaven's desire that the dynasty fall. Once a theory was made to explain away a thing, life for the Chinese Brahmins was normal, quiet. Not for the peasant though. He suffered defeat, he suffered endless death. Mencius proclaimed centuries ago that those who work with their hands were inferior to those who worked with their brains. The peasant had nowhere to go. He was enslaved. He was beaten. He was starved. He was killed.

Mao and his communist party changed this. The Chinese peasant regained his self-respect. Indeed it is wrong to say that he regained it, for he never had it. The peasant could hardly spell 'dignity'. Mao and his comrades taught him how to. Mao formulated, way back in 1926, that the peasantry was to be the vehicle of the coming revolution. He told them that the imperialists, landlords, and the big bourgeoisie, were all out to sell China. It was the peasantry, with the very small working class (of about two million people at that time), which would and had to make revolution in China. The rest would worship either the imperialists or the God of Wealth Hsuan-Hsueh (the Chinese counterpart of the Indian Kubera).

The peasant must stand up. There was little point in merely destroying

the dynasties, as the Chinese peasants and their secret societies had done. It was important, as Lenin argued, to smash the old State machine. An enormous peasant army, equipped with a proper theory of political and economic change, was born in Hunan province. The Chinese peasant had at last taken up the challenge.

The term 'revolution' has interesting connotations in the Chinese language. Unlike in English, the Chinese term for revolution *ge ming* — has an exclusively political meaning. It literally means "to deprive a ruling dynasty of the divine mandate to rule". The Chinese peasant knew what the *ge ming* was. He understood Mao correctly and fully when Mao asked him to put "politics in command", for he knew that in any genuine *ge ming*, politics always was in command. He also understood that you could not possibly deprive "a ruling dynasty of its divine mandate to power" without violence. People do not pass from one dynasty to the other in a 'peaceful' way.

What the peasant did not know — and what Mao taught him — was that for the 'revolution' to go beyond the mere change of mandates, it was important that he proletarianise himself. The audaciously glorious contribution of Mao is his grand effort to create a proletarian consciousness among the vast masses of the Chinese peasantry. Within the space of twenty-eight years, the six hundred million peasants of China became a magnificent proletarian force and brought about the *ge ming* which has no parallel in China's history. Therein lay Mao's creativity.

Mao's major worry was, and had always been, his peasants. Not too many people in today's world have a moment to spare for the peasants. Mao gave his lifetime to them. He had seen much too much of poverty around. It was unthinkable for him that a revolution should lead to declining standards of living, particularly in the countryside. It is often argued that Mao was an ascetic of a kind. He is portrayed much too often as a typical oriental sage trying to create a reign of virtue in China. It would seem from these accounts (as also from some ostensibly more reliable socialist accounts!) that, in the 'Maoist' society, the material needs of man would not be fulfilled but would, rather, wither away! In his essay on 'Ten Great Relationships'



September 11, 1976

Mao has categorically argued that the standards of living in the countryside — and that is where eighty per cent of the Chinese people live — cannot and should not suffer. It is not only a matter of theory though. The Chinese peasant has, under the overall leadership of Mao, at last made a *ge ming* which has succeeded in giving him a proper dwelling, proper clothing, and proper food. All learned discussions on the role of this revolutionary would be much more realistic if this simple fact, and what it means in concrete terms, were taken into account. Throughout the Chinese history before Mao and his revolution the Chinese peasant had starved. He no longer does.

But then nobody lives by bread alone. Nobody should. A revolution will have little to commend itself if its achievements are limited to feeding, clothing, and housing its people. When a revolution does it on the scale on which Mao's revolution has done it, it is indeed awe-inspiringly magnificent. Yet, it is not all that the revolution is about.

A revolution not only deprives the ruling dynasty its mandate to rule (to speak in the *ge ming* language) but it deprives also the ruling ideas and values of their mandate. Mao knew his "Manifesto" well — though many socialists here and abroad would question this. The "Manifesto" talks of two ruptures. Mao was keen that the Chinese revolution should achieve the second rupture as well: a rupture with old ideas, old habits, old customs, and old culture. Mao's major contribution may well be his attack on the 'superstructure'. He was easily the first communist to have made the Marxist theory of the superstructure 'burst into praxis', to borrow Luckacs' phrase. His last years were spent in organising revolutionary warfare on the old superstructure. His experiments with continuous revolution, his mass campaigns, his efforts to go beyond the party to continue these attacks on the superstructure, were related to his understanding of the 'second rupture'. He saw, very vividly and clearly, that the struggle to bring about the second rupture alone ensures that the first rupture survives. That was Mao's vision — a great vision befitting a great revolution, befitting the great Chinese peasant.

Mao Tse-tung is dead. A revolutionary is dead. A visionary is dead.

## INDUSTRIAL FINANCE CORPORATION OF INDIA

### 6% BONDS 1986 (THIRD SERIES)

Payment of Interest and Repayment of Principal Guaranteed  
by The Government of India

AMOUNT OF ISSUE : Rs. 29,50,00,000/-

ISSUE PRICE : Rs. 99/- PER CENT

REDEEMABLE AT PAR ON THE 13TH SEPTEMBER, 1986

The Bonds are approved securities under the Indian Trusts Act, the Insurance Act and the Banking Regulation Act, and are also eligible for grant of advances to scheduled banks by the Reserve Bank of India. These are on the approved list of securities of the State Bank of India and are also eligible for investment of the accumulations of the Provident Funds, both exempted as well as non-exempted.

Subscription will be received in cash/cheque/draft at the branches of the Reserve Bank of India at Ahmedabad, Bangalore, Bombay, Calcutta, Hyderabad, Kanpur, Madras, Nagpur, New Delhi and Patna from Monday, the 13th September, 1976. 4% I.F.C. Bonds 1976 due for redemption on the 15th September, 1976 will be accepted at par for conversion into the new series. The list will be closed without notice as soon as the total subscriptions amount to Rs. 29.50 crores, and in any case, not later than the close of business on Thursday, the 16th September, 1976. The Corporation reserves the right to retain subscriptions received upto 10% in excess of the sum of Rs 29.50 crores.

The Bonds will have a currency of 10 years, and will be repaid at par on the 13th September, 1986. These will bear interest at the rate of 6% p.a. from the 13th September, 1976. Interest will be payable half-yearly on the 13th March and 13th September and will be subject to tax under the Income Tax Act, 1961.

#### CONVERSION TERMS

4% I.F.C. Bonds 1976 due for redemption on the 15th September, 1976 will be accepted at par in payment of subscription to 6% I.F.C. Bonds 1986 (Third Series). If the cash value of 4% Bonds 1976 tendered for conversion is not an exact multiple of issue price per cent of 6% I.F.C. Bonds 1986 (Third Series) applied for, the tenderer will receive in cash at the time of issue of new Bonds the amount by which the value of the Bonds tendered exceeds the nearest lower multiple of the issue price. Interest on 4% Bonds 1976 tendered for conversion will be paid at the stipulated rate of 4% p.a. upto and inclusive of 12th September, 1976, at the time of issue of new Bonds.

Copies of the Prospectus and application forms can be had from the Offices of the Reserve Bank of India as also from the Head Office of the Corporation at the Bank of Baroda Building, 16-Parliament Street, New Delhi-110001, and its Regional and Branch Offices.

Arrangements will be made for listing of these Bonds with the Bombay, Calcutta and Madras Stock Exchanges.

Brokerage will be paid at the rate of six paise per Rs. 100/- to recognised banks and brokers on allotments made in respect of applications for the Bonds tendered by them and bearing their stamps.

New Delhi  
Dated 31st August, 1976.

BALDEV PASRICHA  
Chairman



# Booming in Diversification

Hansavivek

LARSEN AND TOUBRO's performance during 1975-76 has been indeed creditable in the face of severe competition at home and abroad and the power cut almost throughout the year. Production was raised, and profitability improved through judicious management of financial resources. Not only have sales and profits expanded, but earnings per equity share have further looked up — in spite of the increase in share capital through a 'rights' issue. H Holck-Larsen, chairman, expects this trend to continue in the future too; the company intends to expand manufacturing facilities and create new ventures by ploughing back a substantial part of its profits. During 1975-76, the company's production, in terms of value, rose by more than 21 per cent — from Rs 37.2 crores to Rs 45.2 crores. Manufacturing inventories were held well under control through judicious utilisation of import licences and better planning of purchases. The company handed over the second nu-

clear reactor vessel to the Madras atomic power project. It also manufactured, for the first time in India, suspended particles drying plants for titanium dioxide, and tile clay. Another 'first' was manufacture of a high-speed bottling plant with a capacity of 24,000 bottles per hour for the Delhi milk scheme. Three more plants of this capacity are to be delivered shortly. Sales of switchboards and control panels reached an all-time high, but sales of standard switchgear products and of bottle closures were affected by the recession in demand — though the company was able to secure a better share of the market for these products. L and T has booked orders for supply of plant and equipment to various fertiliser units, 'end shields' for the Narora atomic power project, and large crushers, mills, and kilns for the cement industry. The new project at Bangalore for manufacture of hydraulic excavators, under licence from a French firm, is in

progress. Part of the plant and machinery has been installed, and 20 machines have been delivered already. The company was able to step up sales from Rs 2.1 crores to Rs 3.2 crores.

Among the subsidiaries, Engineering Construction fared well during the year to September 1975, with higher sales and a satisfactory order backlog of Rs 17.8 crores. L and T Drilling Equipment, which has since been merged with L and T from October 1, 1975, showed a marked improvement in sales and profits. Its product lines — drilling rigs for water and mineral exploration and diamond bits — offer good potential for growth. L and T-McNeil produced 25 tyre curing presses during 1975, against 11 in the previous year; but the financial results turned out to be unsatisfactory as one customer did not take timely delivery of presses made to his specification. The problems have since been resolved and the company has sufficient orders on hand for the current year. Utkal Machinery recorded a spectacular growth of sales and profits during 1974-75 and was able not only to wipe out the accumulated

## The Week's Companies

(Rs in Lakhs)

	L and T		Straw Products		Blue Star		NICCO	
	Latest Year 31-3-76	Last Year 31-3-75	Latest Year 31-12-75	Last Year 31-12-74	Latest Year 31-12-75	Last Year 31-12-74	Latest Year 31-3-76	Last Year 31-1-75
Paid-up capital	855	707	414	414	102	80	202	202
Reserves	1249	963	837	753	91	83	143	154
Borrowings	1199	1404	1135	1151	148	162	130	107
of which Term borrowings	435	425	611	695	—	—	—	—
Gross fixed assets	2347	1880	2714	2554	115	106	240	231
Net fixed assets	1746	1314	1759	1763	64	63	78	76
Investments	354	325	197	20	1	1	6	6
Current liabilities	2817	2162	629	405	919	874	142	168
Current assets	4019	3564	910	829	1194	1136	533	549
Stocks	1821	1917	654	505	820	803	214	229
Book debts	2123	1605	359	272	358	319	302	308
Net sales	6982	5913	1815	1873	2017	1981	665	513
Other income	261	196	24	25	12	13	21	22
Raw material costs	3571	3425	662	768	1484	1510	351	201
Wages	1212	1116	359	281	259	242	101	104
Interest	192	175	126	119	21	19	20	17
Gross profit (+)/loss(—)	975	699	441	607	125	93	39	84
Depreciation provision	113	95	166	146	8	7	9	9
Tax provision	455	285	140	—	80	60	14	41
Net profit (+)/loss(—)	407	319	135	461	37	26	6	34
Development rebate provision	—	21	—	172	—	—	—	3
Transfer to reserves	263	181	81	231	22	17	—	17
Dividend								
Amount	P 10 E 134	10 107	P 7 E 47	7 51	P 1 E 14	1 8	P — E 8	— 14
Rate (per cent)	P 9.50 & 6.50 E 18	9.50 & 6.50 11.02	P 9.50 E 14	9.50 15	P 7.80 E 15	7.80 11	P — E 4	— 6.7
Cover (times)	2.96	2.70	2.72	5.53	2.57	3.12	0.75	2.21
Ratios (per cent)								
Gross profit/sales	13.86	11.82	24.30	32.41	6.19	4.90	5.86	16.37
Net profit/capital employed	12.32	10.37	5.66	19.89	10.85	8.00	1.27	7.34
Inventories/sales	26.08	32.42	36.03	26.96	40.65	40.53	32.18	44.64
Wages/sales	18.07	18.87	6.93	6.35	12.84	12.19	15.18	20.27



loss but also to create a modest reserve of Rs 25 lakhs. It is seeking financial assistance of Rs 1.2 crores from financial institutions for financing its three-year development plan, which includes a major expansion of the foundry. The associate companies too did well. Audco India stepped up its sales from Rs 2.3 crores to Rs 3.2 crores. It has secured substantial export orders. Eutectic Welding Alloys of India has made important additions and improvements to its product-range and achieved substantial increase in exports. Tractor Engineers experienced a declining market and increased competition in under-carriage parts. It is considering plans for diversification. Hindustan Brown Boveri registered fair increases in sales and earnings and made further progress in the manufacture of high tension switchgear and power line control equipment. The company has several diversification plans on hand.

**STRAW PRODUCTS** is going ahead with its project for manufacture of 5,500 tonnes of M G industrial packaging and base paper at its board mills at Bhopal. It has placed orders for indigenous plant and equipment and expects to commence commercial production early next year. The company has also received a 'letter of intent' for stepping up capacity for manufacture of MF and MG papers by 4,000 tonnes. The scheme of amalgamation of Dena Bank Ltd with the company has been sanctioned by the high courts of Orissa and Bombay — subject to the modification that the rate of cash option per share in the erstwhile banking company be increased from Rs 110 to Rs 120. The company is awaiting approval of the Central government in this regard. LIC and IFCI have exercised their option to convert Rs 8 lakhs and Rs 12 lakhs, respectively, out of their loans into equity shares of Rs 10 each at a premium of Rs 2.50 per share. During 1975, the company produced 48,475 tonnes of paper and board — against 48,680 tonnes in the previous year. Production at the board mills would have been higher but for the 15 per cent power cut imposed by the state electricity board. Production of coated papers and boards was only 371 tonnes because of poor offtake on account of restrictions on their consumption which were relaxed only in November 1975. Fall in prices of paper and increase in costs left their mark on profit-margins. Dividend, reduced by a point to 14 per cent, was covered 2.7 times as against 5.5 times previously.

The company could not earn any foreign exchange last year — whereas it spent more than Rs 16 lakhs on imported spare parts and components and on interest, etc.

**BLUE STAR** has achieved all-round fair improvement in its performance, despite difficult economic conditions and power shortage. This has been possible because of the sustained efforts at diversifying the company's activities. Profit margins are up and dividend — raised by four points to 15 per cent — is covered nearly 2.6 times by earnings. The machinery and appliances divisions were particularly affected by the recession in demand, but the electronics division did exceedingly well and the projects engineering division too reported much better performance. Export earnings expanded, from Rs 32 lakhs to Rs 59 lakhs. The company has been registered as an 'eligible export house' initially for engineering products. Steps are being taken to diversify the export activities. The company has installed a diesel generating set to augment electric supply. The management is considering a proposal

for expansion of factory buildings and installation of additional plant and machinery. Increasing emphasis is being placed on research and development and diversification of manufacturing activities.

**NATIONAL INSULATED CABLE COMPANY OF INDIA (NICO)** has shown a marked improvement in production. Its ACSR and AAC production expanded by 125 per cent to a new peak of 1,051 tonnes. The enamelled wire section also reached its highest production level at 332 tonnes. Both these sections more than compensated for the loss of production in the VIR/PVC insulated cable section. The special cable section increased output by 15 per cent. Although sales were considerably higher, margins were eroded by escalation of prices of raw materials and excise duties, on the one hand, and reduction in prices by over 10 per cent in certain products, on the other. For instance, prices of aluminium rose by over 50 per cent as money grew dearer as interest rates were jacked up.

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	c. 4 core 4 sq. mm. (7/0.85 mm)			
	d. 8 core 4 sq. mm. (7/0.85 mm)			
	e. 8 core 2.5 sq. mm (3/1.06 mm)			

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NEW DELHI

## Time for Rejoicing

B M

THE elaborate year-long golden jubilee celebrations of the Federation of Indian Chambers of Commerce and Industry which were launched with much fanfare last week at Bombay does not look like becoming an ordinary or conventional ritual associated with such occasions. It is being taken very seriously by the business community. The first ceremony staged at Bombay in this connection was a good indication of that. It was an impressive display of growing understanding and liaison between the captains of industry and trade and the government. This understanding is now beginning to find firmer and clearer articulation on both sides.

This is in marked contrast to the gloomy talk of the death of the mixed economy and the strangulation of private enterprise which used to be heard not so long ago. Only last year at the meeting of the Associated Chamber of Commerce in the capital, J R D Tata had forcefully expressed the anxieties and apprehensions of the business community on these lines. The cumulative effect of stagnation in the economy over a long period and of the falling rates of savings and investment had created their own strains and distortions. The principal bone of contention which emerged in these conditions was the question of allocation of resources as between the public and the private sectors. Private sector spokesmen objected to the pre-emption of available investment funds for the public sector, often allegedly for "unproductive" purposes.

The debate was, of course, somewhat phoney. It was not fortuitous that the public and private sectors had marched in step and re-inforced each other's growth in the fifties and the early sixties when the development process was making some headway. The recession that hit the Indian economy in the mid-sixties was a painful but instructive experience for the leaders of the government as well as the private sector. They have had no hesitation in admitting since that investment in the public sector was a necessity for the growth of private enterprise and that such investment created the essential infrastructure enabling private business and industry the chance to thrive.

The trouble subsequently arose with the ascendancy of populist radicalism in official policy and of short-run expediency in the management of the economy. The system of controls and regulations which acquired still greater complexity in these conditions and the bureaucratic administration of these controls were not only irksome for the business community, but also blocked productive activity and bred inefficiency as well as corruption.

The declaration of the emergency in June last year has changed the scene. The biggest gain both for the government and the business community has been the end to hesitations and a bold shift from earlier radical posturing and doctrinaire pretensions to 'pragmatic' measures implemented with great 'flexibility'. After some time of waiting and watching, the leaders of the private sector soon came to realise that fresh opportunities have opened up for them and that their earlier uncertainties and apprehensions were now misplaced.

The budget for the current year and a series of other initiatives towards unshackling industrial enterprise have been widely appreciated and welcomed not only by Indian business and industry but also by foreign investors. It would be hardly lost on shrewd businessmen that a new balance is being struck in the mobilisation and deployment of resources. The government has not hesitated to accept selective losses of revenue and even to provide budgetary subsidies for industries facing recession. It has also not hesitated to permit erosion of internal surpluses in the private sector if it was considered necessary to stimulate the capital market and restore the confidence of the investing public. At the same time such fiscal and monetary measures have been readily counter-balanced, to the extent necessary, by others, among them wage and bonus

restraints, in order to prevent excessive pressure from the demand side getting out of hand and generating inflationary conditions. Above all, the environment of discipline and industrial peace after the emergency has come as a great boon to industrialists.

There is a widespread belief in the business community that the government is determined to remove all hurdles in the way of economic advance in which the private sector is assured of a profitable role. It is, therefore, time to rejoice and celebrate and the golden jubilee celebrations of the FICCI provide the right occasion for consolidating and extending the gains of the past year. The opening notes of optimism have already been sounded. In contrast to the gloomy picture painted by J R D Tata last year has come the statement of G D Birla who has been living in seclusion and had maintained a studied silence for long. He thought it fit to come forward in the open at last and his declaration that government was taking keen interest in promoting investment and production and had done "many things" to improve the climate is going to have a greater impact in India and abroad than any one else saying the same thing.

Official circles in New Delhi have also noted with much satisfaction the statement of Orville L Freeman, who came to India last year as Chairman of the Indo-US Business Commission, about the prospects of foreign capital investment in response to the new hospitable climate for business activity in India. Particularly gratifying for them is the fact that Freeman has specifically noted that the "current budget and new policies initiated by the India Government" after the last session of the Business Council in New Delhi promise to make India a "fairly exciting and growing market" for foreign investment. Appropriately, therefore, the International Chamber of Commerce will hold its board and council meetings in New Delhi in December when a seminar will also be organised on "International Economic Order: New Dimensions" which the Prime Minister will inaugurate.

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## AGRICULTURE

## Problems of Shifting Cultivation

Arun Majumder

THE seminar on Socio-Economic Problems of Shifting Cultivation held at Shillong on June 18-19, 1976 under the auspices of North-East Indian Council for Social Science Research (NEICSSR), Shillong, was a well-meaning effort to understand one aspect of agricultural production as practised by a section of India's tribal population. Divided into four sessions — historical, sociological, economic and technological and ecological — the seminar also provided for a session on general problems of shifting cultivation. But despite the commendable purpose and painstaking efforts of the organisers, the seminar was mostly reduced to an elitist exchange of views on agro-engineering and agronomic problems of shifting cultivation without bringing within its purview vital problems of shifting cultivators.

Most of the papers (numbering 20), as noted earlier, dwelt on agro-engineering problems, presumably because the participants, mostly coming from outside the tribal world, could hardly exercise their understanding deep enough into the socio-economic ethos of the north-eastern tribes. As a result, even the economists and anthropologists, not to speak of soil scientists or agronomists preferred stigmatising shifting cultivation 'as a necessary evil' and concentrated on speculations as to how the evil could be removed or at least tempered with the civilising influence of green revolution. Recommendations were varied in nature. Some gave emphasis to the development and extension of forestry as a potential commercial venture; some others preferred extension of horticulture; and there were some who found the solution in terraced cultivation through substantial — if not complete — elimination of slopes in terrains. To nearly all, soil erosion, deforestation and consequent ecological imbalances, low productivity, absence of agricultural surplus, primitive techniques of production and hence non-industrialisation were the inevitable results of shifting cultivation. Nearly all who pronounced such judgments on shifting cultivation also agreed — ironically enough — that there had been little or no research on the soils of the area, or water conservation technology,

and agrarian production techniques suitable for hilly slopes of the region. One of two participants stopped short to concluding that tribal people stick to shifting cultivation because of their primitive outlook or that they are themselves to be blamed for creating the difficult terrain. No tribal cultivator or someone among tribal population even indirectly connected with the problems of shifting cultivation participated in the seminar. Those who did — clearly part of an emerging tribal elite and quite out of touch with their social ranks — only cursed the people for shifting cultivation.

Nevertheless, there were a few papers which sought to examine the problem without condemning either the people or the terrain. One was a joint paper from D N Barthakur, R P Awasthi and S P Ghosh dealing with 'Alternative Systems of Farming for Increasing Productivity in Jhum lands'. Another was by B P Mishra which made a 'Positive Approach to the Problems of Shifting Cultivation in North-East India'. The other papers which provided some valuable insights to the socio-economic impact of anti-Jhumming measures on tribal population were from J B Ganguly and Saradin-du Bose.

The joint paper — a massive one — emphasised the "undulating topography, humid climate with thick vegetation, low pressure on land and community system of land tenure" as factors responsible for the emergence of shifting cultivation. It admitted that so far "studies wholly devoted to the problems of agriculture and its production by agricultural scientists are limited". Nevertheless the paper recommended some short-term and long-term measures to meet the problem of low productivity of land, soil erosion and proper land-use planning. Planned land-use measures should be taken up with forests on top of the hills, and lower down in gentle slopes, the middle portion might be continued with Jhum alternating with silviculture. Crop planning and silviculture practices should be so designed as (a) to make full use of inherent fertility and (b) to restore the fertility when exhausted. They ruled out complete terracing of Jhum land as 'practically not

feasible'. Nevertheless, as one of the measures in the first year they advocated puertorian type of terraces by making natural control bunds with unburnt logs of wood available after the burning of forest sites. They further suggested that during the second year there should be half-moon terraces for planting horticultural crops, and levelling and partial terracing in the third year. Apart from planning of land-use, the paper suggested the construction of water reservoirs at suitable locations, various crop management practices like strip and mixed cropping, relay cropping, green manuring and crop planning with the help of the use of manures, chemicals and fertilisers. 'The basic objective' of the joint paper was to find out the means for 'long-term permanent cultivation' for the permanent settlement of Jhumias. It is to be pointed out that these are all speculative propositions, quite natural perhaps, coming as they do from the director, the agronomist (crop production) and the senior horticulturist of the ICAR research complex for NE Hills region. There was no indication in the paper whether they had tested the feasibility of any of their ambitious recommendations.

The paper by B P Mishra questioned almost all the premises on which shifting cultivation is condemned. The paper said that the idea that "shifting cultivation in the region is responsible in the main for large-scale soil erosion, needs to be effectively dispelled". A fairly well distributed annual rainfall of about 100 inches, high humidity, and the peninsular character of rock formation had provided climatic and soil conditions so conducive to the growth of vegetation that no sooner was a parch of land left to itself than it was rapidly covered with a thick blanket of vegetation. The only time when the soil slopes got washed away was when they were under agricultural crops. The surprise was therefore not that there was soil erosion in the Shillong plateau, but that there was so little of it. In the Garo Hills, for ages under Jhum cultivation, one still could see streams carrying clear water after heavy showers. Horticulture as a substitute for shifting cultivation was, according to Misra, a poor if not harmful alternative to the production of agricultural crops through Jhumming. 15 per cent of the pineapple and 53 per cent of citrus fruits grown in the region was already surplus. Thanks to the preponderance of middlemen traders, "the primary producers receive barely 10 per cent of the retail price of the



fruit, while the average cost of producing one tonne of processed fruits in this region is nearly 10 per cent higher than that in the country as a whole". The paper ruled out terracing as an effective answer to the problem of shifting cultivation. Without soil survey, terracing would be unwise because of its heavy cost and risk of landslides. Moreover, not even one per cent of the territory of the NE region had been properly surveyed till the middle of 1972. Only slopes with a width of 15-20 feet could be used for bench-terraced cultivation. According to Misra, it was doubtful whether such a large land mass for bench-terraced cultivation was available in the region to substitute completely the 4,57,000 hectares under shifting cultivation. And even if everything went well, it was doubtful whether the tribal producers would be benefited by the tremendous growth of cash crops. Already the NE Hill region had been producing cash crops for a long time without accruing to itself any benefit. According to Misra, the idea that Jhuming or shifting cultivation yielded low output was a myth. In 1971-72, the yield from Tripura Jhum cultivation and the all-India average was, respectively, 1151 kg and 1145 kg per hectare. "It is the cash nexus with the rest of the [Indian] economy entered by them through the production of cash crops and borrowing of money that tends to impoverish them." But this observation remained unelaborated either in quantitative or in qualitative terms.

J B Ganguly pointed out in his paper the slow emergence of stratifications within the tribal community. Ganguly further showed that a class of vested interests somewhat alien to the sense of dignity of labour and the egalitarian ethos of tribal communities had been growing among them. But he failed to explain adequately the socio-economic planks on which this new phenomena of social stratification and vested interests have based themselves in recent times; this could have been one of the important points of discussion and analyses of the seminar.

It is not Jhuming or shifting cultivation, but rather the factors determining the terms of trade between the NE Hill economy and the rest of India which explain the poverty and underdevelopment of the region. By emphasising the technological rather than the socio-economic aspects of Jhuming, the seminar fell short of its avowed objective. It was through the intervention of D D

Narula (Director, ICSSR) and Amalendu Guha (Centre for Studies in Social Sciences, Calcutta), that some of the socio-economic implications of the adoption of sudden anti-Jhuming measures were brought out. Although there was a broad consensus among the participants that dearth and poverty of statistics on the area made any meaningful study difficult, there was no qualitative assessment either on the stage of development or modes of production in the region. Perhaps this was the reason why the seminar could not arrive at any socio-economic perspective of the problem and no semblance of unity or aspect of convergence of views on various aspects of the economy emerged across the sessions of the seminar.

To say all this is not to imply that

## BIHAR

# A Labourer Goes to Court

Arun Sinha

AKLU CHAMAR, like most farm labourers of Purnea, is a specimen of malnutrition. A frequent victim of malarial fever, his body has shrunk. His ribs and cheekbones threaten to break out of the skin. His back is hunched; his breath is short. What the Collector of Purnea wrote of the raiyat in 1875 is true of Aklu today — "Aklu lives, and that is all".

On August 5, 1974, for the third time, Aklu goes to his master, Bindi Mahto, begging to be paid his wages. Twice before the master had procrastinated: "Do you think I'll swindle your wages? Come tomorrow". Could he disbelieve the master? After all, their relationship is not a new one. It had begun with his grandfather around the turn of the century. Aklu walks back to his home, a jute-stick hovel in the Chamar-Toli. There is sitting his fatherless nephew, Bonka, who works with him for the same master, and has got today the same assurance. Aklu sees from a distance some more people sitting; from near, he recognises the five Musahars who had been kicked out of the village by Bindi Mahto some days ago.

The reason for their 'exile' was quite trifling, and yet very significant. One day, the wife of one of the five Musahars had gone to the master's field, wherefrom the paddy crop had just been collected, and was 'pilfering' the scattered grains, spilt in the course of

technological aspects which drew much of the attention of the seminar are less important. They are indeed important even for understanding the socio-economic aspects of shifting cultivation. But then, from a merely technological point of view, there was no justification for excluding the experiences of tribal shifting cultivators of Bihar, Orissa, Madhya Pradesh, Andhra Pradesh and Karnataka where the tribal population is interspersed with the non-tribal population. Such exclusion could have been justified only if the seminar had concentrated on a socio-economic approach — the various forms of economic interactions between tribal states of NE Hill region, their modes of production and exchange and the modes of production and exchange in the rest of Indian economy.

harvesting, when Bindi Mahto spotted her by chance. He ran to her and slapped her thrice in the face. The woman reported this to her husband who, in turn, consulted others in the Musahar-Toli. Three days later, the master happened to pass through the Musahar-Toli. From one of the hovels the woman whom he had slapped ran out with an earthen container in her hand; she smashed this weapon on the master's head and scampered back into the cluster of huts. Needless to say, this was playing with fire; the next morning, the master raided the Musahar-Toli with 50 hired toughs, beat and humiliated the five 'blacklisted' Musahars and their women. He decreed on the spot that the five Musahars must quit the village. "They quit."

For the last three days, the 'exiled' Musahars have been coming to Aklu and suggesting that he sue the master for non-payment of wages. "How come you have got no remuneration for the past 11 months and you tolerate it? Have courage; sue him." Approaching the assemblage in front of his hovel, Aklu is perturbed that the Musahars will repeat their suggestion. The Musahars do. Tears well up in Aklu's eyes. The mother of his five children is peeping from behind the door. Their eyes meet. For the last 11 months, Aklu's joint family has been living in semi-starvation, borrowing grains from this man and that, as also from the



master. The borrowings have been heavy, though Aklū cannot say how much. He can, however, calculate his arrears of wages. He has worked for 11 months during three crops of paddy, jute and maize, and at the rate of Rs 30 a month he can claim Rs 330. His oral work contract provided for a monthly wage of Rs 30.

All 'harwahas' (attached labourers) in Purnea have similar oral contracts. The harwaha contract in Purnea is different from that prevalent in several other areas of Bihar in as much as it provides for a monthly salary. The harwahas of Patna or Bhojpur, for instance, do not get this pecuniary benefit. It is possible that the 'topra' (a small, 0.3 acre-plot given by the master for the harwaha's exclusive cultivation) which is available to the harwahas of Patna is a substitute for the monthly salary. In Purnea the typical way to trap a harwaha is to lend a small sum or a few kgs of foodgrains and force him to thumb-mark a bond reading something like this: "I, so-and-so, have taken a sum of so many rupees as loan from so-and-so. I agree to work as his harwaha at a monthly wage of so much [usually Rs 9 to 30] till the loan is repaid." During the past four months the gram panchayat supervisor of Krityanand Nagar block, which covers the Baniapatti village of Aklū Chamar, has seized several such bonds. One reason why cash, however small, and not grain is given in Purnea, it may be conjectured, is the early development there of marketing of jute, a principal cash crop in Purnea. For the same reason, money payment of daily wages is as popular in the district as grain wage. In several parts of the state — for instance at Bikram block in Patna district — money payment is still unknown.

Aklū does not know that the monthly wage of a harwaha in Purnea district, as fixed by the government in 1974-75, is Rs 100 plus two meals for daily labour. As daily payment he has been receiving only 1.5 seers of maize and nothing else. The 1.5 seers of maize is, according to the gram panchayat supervisor, the standard daily wage both for harwahas and free labourers in Purnea; when payment is made in cash it comes to 50 paise (at 1974 prices). Last year, when the government rates were publicised through newspapers and other sources, the employers increased the wage to 75 paise to one rupee plus some re-

freshments. The one-rupee new standard is the maximum wage and is less than one-fourth the minimum as fixed by the government. The official rate is Rs 4.50 plus 500 gms of refreshments (other than khesari) or Rs 5 without refreshments or 3.25 kg of paddy.

The gap between the statutory minimum and actual wages is glaring for all types of agricultural work. In harvesting, the cutter is to get one bundle for every 10 bundles whereas in practice the ratio is usually fixed at 1/16. The position is the same in transplantation, weeding, etc. The harwaha is given a 10-katha plot for sharecropping. But the employer keeps on changing the plot every year, if not every season, in order to guard against a claim against ejection, and later, for occupancy. Another reason why the employer is interested in shifting the harwaha is that this improves the landowner's land plot by plot as the labourer puts in all his effort, mobilising usually all his family, to get a better yield.

August 6, 1974. Aklū once again treks to the master's house, brooding all the way. The manager is the first man to meet him. After some time Bindi Mahto comes out and greets the harwaha warmly. Aklū immediately comes to the point. The master asks the manager to fetch the labour register. Aklū waits. The master turns over a few pages and pauses. "You owe me Rs 229. You remember the grain you took during the past one year?" The harwaha is dumb-struck. He first complains that the food loan has been over-stated, then pleads for mercy and ultimately just keeps quiet. "You have come for arrears, Aklū? Do first pay my arrears", yells the master. There is no point in arguing with Bindi Mahto; he is a big man and the 'leader' of the landowners of Baniapatti. He is a notorious loan shark. His clientele is not limited to the village; according to labour sources, he lends money to several traders and middle-class householders in Purnea town and Gulabghat market, the biggest wholesale grain market in North Bihar. He owns 125 bighas in Baniapatti his native village, and 25 bigha plots in several other villages. At home, he has distributed his land among his 3 sons. In Kasba village, some years ago, he took a 30 bigha plot from Kishun Prasad for sharecropping. Later he seized the plot. It is Bindi Mahto

who fixes the wage rates in his village; one day, when the clamour for government fixed rates could be heard growing nearer, he convened a meeting of the landowners and directed them to pay the labour at the usual rates.

Bindi Mahto is the most feared and the shrewdest member of the executive committee of Baniapatti primary agricultural credit society. His elder brother, who is now dead, had been the society secretary for years. He never handed over the full loan sanctioned nor issued a receipt. Five years ago, the secretary persuaded Aklū to buy two shares of the society at Rs 10 each on assurance that he would be getting ten times the amount as loan. Says Aklū: "One year, when the crops had failed, I went to the secretary to ask for a loan of Rs 200. The loan was allowed but I got only Rs 100. I asked for a receipt. The secretary said he had to consult the co-operative officers in Purnea, and the officers were at present away on leave. I reminded him several times, but I got the same evasive replies. Then some months later, the secretary ordered me to repay the loan in instalments. He took Rs 35 from me and gave me no receipt. The police is now arresting the defaulting members. I am fearing every moment a knock at my door."

Aklū returns home. The five Musahars and his nephew are waiting for him. Hurriedly, a discussion is held and the nephew is asked to bring two other harwahas working for Bindi Mahto. The mood is different today at Chamar-Toli. The two other harwahas arrive and after hearing about the plan, one of them advises that they first approach the labour union. Which one? There are two farm labour unions reportedly functioning in the area. One is the Khetihar Majdoor Congress, a wing of the parent party, and the other socialist-led Kajha Labour Union. The gram panchayat supervisor has a very bad impression of both. "They are collaborators or at best the brokers of the landowners", comments the supervisor. One of the harwahas echoes the supervisor's view, "they are useless". He suggests an approach to the gram panchayat supervisor. Up jumps one of the Musahars: "We had first gone to him. He wanted a share in the payment of the arrears, if any." This is the general opinion. There is one 'charwaha'



(cowboy, another form of attached labour peculiar to Purnea) who once went to the supervisor to file a case and ultimately it did him more harm than good. The supervisor decided that the employer should pay Rs 300 to the charwaha as wage arrears. The employer paid the amount in the supervisor's presence. When the employer had left, the supervisor took the notes from the charwaha and put 20 ten-rupee notes in his pocket. The charwaha, for whom even the remaining Rs 100 was a bonanza, was gay until he arrived in his village to get the dismissal order from the master. Fearing unemployment and starvation, the charwaha decided to hand the sum back to the master. He gave the master nine ten-rupee notes asking for forgiveness for having spent the remaining ten rupees on the way.

Finally, Aklu, his nephew, the five 'exiled' Musahars and the two other harwahas take a bus to Purnea and after having sought out a cheap lawyer, file a case against Bindi Mahto at the SDO's court. Aklu is modest in his petition. "I have taken food loans worth Rs 129 from Bindi Mahto. My wage arrears lying with him over the past 11 months come to Rs 330. So I should get Rs 201." The lawyer takes nine rupees as his fee. The nine petitioners ride back to Baniapatti, temporarily satisfied.

Some days later word somehow travels to Bindi Mahto about the petition. The first action that he takes is to sack Aklu and his nephew. His second action is to file a petition in the court against the nine labourers for rioting, unlawful detention, etc. Not satisfied, he prohibits the passage of the labourers through his land leading to the Purnea-Saharsa main road. He then consults his lawyer-nephew who practises at the Purnea court and meets the court peshkar who is, according to the labourers, a 'kutumb' (Maithili for 'relative') of Bindi Mahto. The labourers allege that the peshkar gets the dates of the hearing extended every time. For last four months, the date for hearing is being fixed every Saturday and, according to Aklu, every time the hearing gets postponed in suspicious circumstances. For simply appearing in the court every Saturday the lawyer charges nine rupees from the nine petitioners. The lawyer's fee is proving a burden on the wage claimants. Aklu and his

nephew have started working as free labourers in a nearby village. They get one rupee as daily wage; the lawyer's fee is paid from the savings over the week, which can only be made at the cost of food. The labourers now face a dilemma: should they half-starve in the hope of getting

their wage arrears, payment of which is uncertain. Bindi Mahto has money and power and a nephew who appears for him. The labourers are now requesting the block officials to somehow bring about a compromise. The panchayat supervisor is taking great interest in the matter.

## POLAND

# The Price of Food

SOME price changes were expected in Poland soon after the seventh party congress last December. Both party secretary Gierek and Premier Jaroszewicz had been hinting at price changes during the past few months. The public, however, took these for casual remarks. There was no clear statement, no public discussion. Then, on June 23, a series of "soundings" were arranged. (For those with little knowledge of Eastern Europe: this means that party cells are rallied to be told what the party leadership is about to do in some specific respect. Not more than scant advance notice is passed to party members. Poland is partly an exception in that these rallies, mostly arranged in big industrial plants, represent a sort of opinion poll. In the case of price changes these "soundings" took place just one day before the actual announcement.)

## THE SEQUENCE OF EVENTS

The next day Premier Jaroszewicz put the government proposals before the Sejm (the Polish parliament). The mass media published the full text of his proposals on June 25. A wave of strikes and outbursts swept the country. Radom, a town in eastern Poland with about 170,000 inhabitants, became a centre of a violent upheaval. A week later the mayor of Radom had to admit that the "material losses" were of the tune of 77 million Zlotys. Goods worth another 30 million Zlotys were stolen or damaged, and many cars, lorries, buses and tractors were burnt. Attempts were made to set on fire both the city and county administration offices, and the county police headquarters was attacked. Workers of the Walter factory went on strike and a group of them marched through the town persuading fellow workers of other factories to go on strike, too. Starting at nine a.m. the unrest was not quelled before 11 p.m. 75 policemen

were wounded, five of them seriously. Two civilians were killed. "Among the arrested", the mayor complained, "there were many youths who took active part in the incidents".

The same evening (Friday June 25) the Premier appeared on TV and in a broadcast to the nation rescinded his proposals of the previous day. "Throughout this day", he said "in most factories consultations took place on the price issue. Most of the participants comprehended both the motives and the intentions of the government's project. At the same time, however, there were many suggestions and comments as to the change of the price structure, the scope of the changes as well as to the principles of compensation. There is an immense number of concrete propositions which deserve to be thoroughly considered. In this situation the government thinks it inevitable to analyse the whole matter once again. It requires long work of a few months at least. It is for this reason that on behalf of the Council of Ministers, and after consulting the presidium of the Trade Unions Central Council, I have asked the presidium of the Sejm to withdraw the government project for the time being".

Meetings were hastily organised in support of the government all over the country. Declarations of approval of the price changes and of indignation at the "hooligan and barbarian acts" showered on the party central committee. (It was at such a meeting that the mayor of Radom publicly explained the incidents which had "dishonoured" his town.)

On Friday July 2, the party's first secretary Gierek visited his old "fief" of Katowice, a mining town where he had served as regional party secretary before ascending to his present post. In a major speech he emphasised the difference between the present approach of consulting the people before impor-



tant decisions were made and that of the previous leadership during the fifties and sixties when "the voice of the people, of the working class was not heard and the advice, intelligence as well as experience of the working people were not capitalised". He told the meeting: "People's power is your power. We stand firmly on the ground of socialist democracy. It is for this reason we develop and shall continue to develop this democracy. It is for this reason that in accordance with the conclusions of the seventh party congress we shall extend it to include the principle of consulting the people concerning decisions of importance for the society and the working people". But, he went on, democracy could not be ordained by decree; democracy had to be learnt, honestly and wisely. The price change was inevitable, he said, but in the course of the consultations many doubts were voiced — and much psychological resistance was to be met. The increase in wages and allowances was pushed to the background. The reasons, in his opinion, were to be sought in the fifties when price increases were not accompanied by rising wages. The consultations postulated that the needs of lowest income families was to be taken more into account. This required a scrupulous and thorough consideration. In important affairs, he said, "we shall patiently and persistently discuss".

The next course in the price policy was outlined by the premier a week later. He explained that there were tens of thousands of suggestions concerning price changes. Although he did not elaborate, he did however, mention two sets of proposals: "extreme" ones "detached from the hard realities of life" as well as another set of proposals "with an approach from a standpoint alien to us". (This last admission is rather important as it concedes officially the existence of what obviously are leftist ideas among the workers.) The Premier then went on to classify the majority of the propositions. We reproduce his classification in some detail, first, to show how the government project differed from what the people wished and, second, for the reader to understand better the conclusions we draw towards the end of the article.

A considerable part of those participating in the discussions suggested a smaller rise in the prices of meat, fish, sugar and poultry but a steeper rise in the price of bread. It was proposed that the government should elaborate a mechanism which, while assuring

rising real wages would allow elastic pricing, so that prices could be changed on a small scale in course of the year. High single increases remaining in force for a longer period would thus be prevented. Another proposal advocated a gradual increase for particular groups of goods not only to make the price problem more "transparent" but also to enable families to adjust to the changes. And a third group concerned itself with the principles of compensating wages, pensions and family allowances. This group's proposals went far towards more emphasis on the needs of low and middle income families.

On July 13 the Politbureau of the Polish Unified Workers' Party — that is the official name of the communist party in Poland — approved a new price change project. Its main points consisted of the following proposals: (1) In 1976, only the prices of meat, meat products and poultry will be changed. Prices of other food articles remain at the present level. (2) After having finished the project the government will present it to the Sejm. The prices will be raised on the average by 35 per cent. The project will include corresponding increases in wages, pensions, family allowances and other benefits. When the Sejm committees have discussed it, the project will be consulted first of all in big factories. (3) These consultations having been concluded, the government will put definite proposals before the Sejm. (4) The government at the same time decided to increase the purchasing prices for agricultural products together with those of some services for agriculture. (The decision on procurement prices had been part of the original project. It was not withdrawn. The changes in agricultural prices went into effect immediately on July 14.)

#### WHAT WAS TO BE CHANGED — AND WHY

The original government project represented the biggest price change in Poland in the last 23 years. There were several minor price readjustments since 1973 but the essential intervention did not come till the recent increases. One has to bear in mind that this step has its roots in the past — as far back as the fifties. The food market was not balanced, especially not in meat. The ruling group at that time tried to keep the balance by restraining the growth of wages. Between 1965 and 1970 Poland had the smallest rate of wage increases among all the East European countries.

This policy, connected with the name

of Wladyslaw Gomulka, was abruptly changed after Gomulka had to leave and Gierek took up his post. 11.7 million employees had their wages increased between 1971 and July 1 this year. In 1975 the average monthly wage was 3,546 Zlotys in comparison with 2,235 Zlotys in 1970 — an increase of 59 per cent. This amount does not include various bonuses, sickness and family allowances, etc. Taking into account the price increases of the same period real wages grew by 40.9 per cent. Further increases by 17-18 per cent are planned for the period 1976-1980.

Simultaneously with the food prices, procurement prices were also to be increased. Those of animal products were to grow by 19-21 per cent, of grain by 40 per cent, of edible potatoes by 30 per cent, of sugar-beet by 12 per cent. Farmers should have received nominally 46 milliard Zlotys by way of income, of which they would have paid 11 milliard Zlotys for food at the new prices, and 25 milliard Zlotys for building materials and supply of means of production the prices of which would have also risen: those of tractors by 30 per cent, of industrial fodder by 45 per cent, of fertilisers by 20-25 per cent, of sowing materials by 44 per cent.

Why this operation? Two reasons were cited officially. First, the problem of "social justice". If — as was assumed — monetary income has to be an equivalent of quantity and quality of labour, then the present level and structure of food prices in Poland is held to be contradictory. (We may add that the same situation prevails, though to a different degree, in all East European countries, though most of them do not admit it officially.) Food has to be subsidised by roughly 100 million Zlotys. One of the aims of the price change was therefore to make the food prices more "real", to abolish subsidies — to divide the social product, as one paper said, "on the basis of the socialist principle 'each according to his labour'".

Price relations between food and industrial products were labelled "anachronistic". The prices of industrial goods the production of which grew at a rate three times higher than that of agricultural goods between 1971 and 1975, went up by 13 per cent, while prices of basic food remained stable. Neither was the price structure of food articles rational. Egg and poultry were actually more expensive than meat. By proposing a change in favour of poultry the government meant to in-



fluence consumer choice.

The food policy has, of course, to consider Poland's agrarian structure. There are 3.5 million farms — i.e., 3.5 million production decisions. The experience of the whole post-war period proves that the only effective influence is the economic mechanism. The proposed changes were thought a step in this direction. Poland went through two successive years of bad crops. In 1974 a growth of 4.3 per cent in agricultural production was planned. Actually, the increase was not more than 1.6 per cent. In 1975 agricultural production should have grown by 3.7 per cent. In reality it fell by 2.4 per cent in comparison with 1974. Imports of fodder were of unprecedented dimensions — between 1971 and 1975 Poland bought abroad, mostly in the West, 21.1 million tonnes of grain and fodder. The import deficit in agricultural and food products against exports was 4.4 milliard Zlotys. In other words, during the last two years Poland had to increase its imports from the capitalist countries by \$ 1.4 milliard. The crisis of capitalist world also caused a fall in Polish exports to the order of \$ 1 milliard.

By proposing the changes as it had done the government hoped both to stimulate production and direct structural changes of consumption. The cost of living that would have increased by about 16 per cent was to be compensated by increased wages and pensions. Since families with a monthly income of up to 1,000 Zlotys per head assign roughly 50 per cent of their expenses to food, their actual increase would have been 20 per cent. Families with 3,000 Zlotys and more per head spent only 28 per cent for food and their increase would be 12 per cent only. The increases were therefore calculated accordingly. A precise calculation shows, however, the families with an upper-middle income to be better off than those of the low income group.

Now after it has been forced to abandon the first project the government will obviously proceed by gradual increases. If the "target model" of meat prices would require an increase of 69 per cent as some economists think, the rise of 35 per cent as now proposed would mean an increase of about 5 per cent in each of the following five years, thus reaching the target at the end of this five-year plan. There are some indications that such an approach may be used. In general prices will become more elastic. There are hints, too, of a possible indexation

connecting price rises with a corresponding growth of wages. Poland is the first East European country to follow this path of "realistic" prices as it tries to abolish as many subsidies as possible — by the way, an approach very much recommended in the "model" of the Czechoslovak economic reform in the late sixties.

#### THE PRACTICE OF "SOCIALIST DEMOCRACY"

The price project definitely had a class character in that the leadership proposed a change that would have been more favourable to the "elite". The workers clearly saw the neglect of the poor and tried to remedy it by proposing that the needs of low income families should be taken into greater account.

Some Polish journalists complained that the period of two weeks originally proposed for the consultations being shortened to one day contributed greatly to the failure of the project. Supporters of the official line claim the government had to give up the idea of prolonged discussion fearing troubles on the market, speculation and buying up of certain goods — as it was the case above all with sugar. True as these claims may sound, the roots of the trouble are to be found elsewhere. Buying up was going on anyhow. Yet people felt hurt in their human dignity — just being told of a decision of this magnitude that simply had to be swallowed.

No leadership of any East European country including the USSR has at any time actually consulted the people it governs on any major scheme. This results from the very character of these regimes in which the only public "consultation" the people are regularly called to take part in are general elections, i.e., casting votes for representatives who have been chosen for them. Opinion polls, on a very restricted scale and seldom used, might concern particular consumer goods or grievances of local nature. No criticism is ever allowed to be voiced concerning party officials or state functionaries above a certain level. If the Polish leadership deviated from this practice it was because they knew prices were a sensitive issue and a change suddenly imposed might lead to unrest — as it did. On the other hand the Polish working class has gone through more class conscious conflicts in the last twenty years than any other in East Europe, and the ruling elite is aware of this. (Polish

workers could not realise that there was another adversary ready to crush their unrest: immediately on announcement of their violent reactions Soviet troops garrisoned in northern Bohemia close to the Polish border were put on alert — and probably those in East Germany as well.)

The question may be asked why there was no unrest in Hungary where there was a price increase from July 1 affecting meat and meat products, poultry, and fresh and frozen fish. The reason lies partly in the fact that this change had been announced as early as last December; it was also part of a greater price movement going on for the last five years. The Hungarians, calmed down by increases in wages and pensions, had got accustomed to price changes.

A basic change in the attitude of the Polish ruling group as far as the way of "consulting" people is concerned cannot be expected, for the nature of the regime cannot be changed by simply allowing for more "democratic" methods. Even if groups of industrial workers — predominantly party members — are rallied and asked for "advice", this communist use of Bonapartist referendum methods cannot be called democratic. In any case the advice concerns matters that were already decided. What the workers are expected to do is to assure a "smooth" passage of these decisions to the bulk of the people.

Behind the smoke-screen of the cry of "hooliganism" we can feel the deep-seated discontent of people in general and workers in particular. According to the Polish press "important segments" of the working class proposed essential changes in the original project. The fact that the workers felt the project did not take into account the needs of low income families speaks for itself. Living standards in Poland have risen during the last five years — Gierek's first five years — considerably. This may partly explain why the eruption in connection with the price rise was not as widespread and violent as that of December 1970. But for everybody to see, there was once again a proof of how East European "socialist" rulers govern "their" people, imposing "solutions" to problems both themselves and their predecessors accumulated. The harsh sentences just pronounced against Warsaw and Radom workers who took part in the violent protests on June 25, reveal the real nature of this regime.



# THIS IS ONLY AN ANNOUNCEMENT AND NOT A PROSPECTUS

## ANNOUNCEMENT REGARDING PUBLIC ISSUE OF

### 2,94,000 EQUITY SHARES OF RS. 10/- EACH FOR CASH AT PAR

Persons interested in full details may obtain copies of the prospectus dated 16th August 1976 and application forms from Registered Office of the Company or from the Brokers, Bankers and Underwriters to this issue.

THE SUBSCRIPTION LIST FOR THE SHARES ISSUED WILL OPEN AT THE COMMENCEMENT OF BANKING HOURS ON WEDNESDAY, THE 22ND SEPTEMBER, 1976 AND WILL CLOSE AT THE CLOSE OF BANKING HOURS ON WEDNESDAY, THE 6TH OCTOBER, 1976 OR EARLIER AT THE DISCRETION OF THE DIRECTORS, BUT NOT BEFORE THE CLOSE OF BANKING HOURS ON FRIDAY, THE 24TH SEPTEMBER, 1976.

Applications have been made to the Stock Exchanges at Bombay and Madras for permission to deal in and for an official quotation for the Equity Shares of the Company.

#### HISTORY

The Company was incorporated on 30th April 1974 as a Public Limited Company and obtained the Certificate of Commencement of Business on 5th July 1974. The Company has been granted an Industrial Licence No. C: IL: 155 (76) dated 8th April 1976 for manufacture of finished leathers from 1.5 lac pieces of cow-hides and 3 lac pieces of goat/sheep skins per annum.

#### PROMOTERS

The Company was promoted by Kerala State Industrial Development Corporation Limited as Promoter and (1) Sri A.K. Thampy, an industrialist with long standing and experience in rubber, sea-foods and leather industry and trade and (2) Sri T.P. Chandy, another industrialist with over 37 years of standing and experience in leather industry and trade, as Co-Promoters. Dr. K. Thomas Varghese, a medical practitioner, joined as a Co-Promoter in March 1975.

#### PROJECT AND PROGRESS

The Company has set up a Tannery for the manufacture of finished leathers from 1.5 lac pieces of cow-hides and 3 lac pieces of goat/sheep skins per annum at Thrikkanapuram village (near Kuttipuram) in Malappuram District, a notified backward area in Kerala. This is the first unit of its kind in Kerala.

The Company has purchased 6.64 hectares (16.42 acres) of land including 5.36 hectares (13.25 acres) allotted to it by the Government of Kerala. Construction of all factory buildings and essential ancillary buildings has been completed and most of the indigenous machinery have already arrived at site and have been erected. The work on electrification of the factory is over. Roads, compound wall, water supply system and effluent treatment system are also ready.

The Company has obtained capital goods clearance for import of the required machinery. Orders have already been placed for its requirement of imported machinery with manufacturers in West Germany and Czechoslovakia, and the Company expects to receive the machinery at site by November 1976. In the meantime, the Company expects to commence partial production with existing facilities in September 1976. Full-scale production after receipt and erection of imported machinery is expected to commence in January 1977.

#### COST OF THE PROJECT

The total cost of the Project is estimated at Rs. 165 lacs, as under:

	Rs. in lacs
Land and Buildings	29.80
Plant, Machinery and Miscellaneous Fixed Assets	93.45
Preliminary and pre-operative expenses	17.60
Provision for contingencies	8.96
Margin money for working capital	15.19
	<b>165.00</b>

The cost of the project is being financed as under:

	Rs. in lacs
Equity Share capital	60.00
Term loans from IDBI (Rs. 55 lacs) ICICI (Rs. 26 lacs) & IFCI (Rs. 23.61 lacs)	104.61
Unsecured deposits from promoters	0.39
	<b>165.00</b>

\* To be reduced to the extent of the amount of central subsidy of Rs. 15 lacs when received

#### PROSPECTS & PROFITABILITY

There is a very great demand abroad for finished leathers of Indian origin. The Company has an export obligation of 60% of its annual production.

The Government's policy is to progressively reduce the export of semi-finished leathers and to increase the export of finished leathers and leather goods. It is expected that the Company will be able to export much more than the stipulated 60% of its production. There is also a growing demand for finished leathers within the country. The Company, therefore, does not anticipate any difficulty in marketing its output.

#### TECHNICAL KNOW-HOW

The know-how for manufacture of finished leathers is available indigenously, and, therefore, no foreign collaboration is envisaged. However, the Company proposes to avail of the offer received from the Government of Czechoslovakia to depute two leather technologists for the project, after obtaining necessary permission from the authorities concerned.

The Directors are of the view that, barring unforeseen circumstances, the Company will be in a position to pay reasonable dividends within a reasonable time from the commencement of production.

#### SHARE CAPITAL

	Rupees
A. AUTHORISED: 10,00,000 Equity Shares of Rs. 10/- each	<b>1,00,00,000</b>

B. PRESENT ISSUE: 6,00,000 Equity Shares of Rs. 10/- each	<b>60,00,000</b>
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C. OUT OF THE PRESENT ISSUE:	
7 Equity Shares of Rs. 10/- each have been subscribed by and allotted to signatories to the Memorandum & Articles of Association as fully paid-up for cash at par	<b>70</b>

1,44,400 Equity Shares of Rs. 10/- each have been subscribed by and allotted to Kerala State Industrial Development Corporation Ltd. (promoter) (hereinafter called "KSIDC"), which have been fully paid up for cash at par	<b>14,44,000</b>
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1,44,485 Equity Shares of Rs. 10/- each have been subscribed by and allotted to Sarvasri A.K. Thampy, T.P. Chandy and Dr. K. Thomas Varghese (co-promoters), their friends and relatives, which have been fully paid up for cash at par	<b>14,44,850</b>
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Reserved for issue to the Promoters:	
11,593 Equity Shares of Rs. 10/- each have been reserved for firm allotment to KSIDC for cash at par, the full value whereof has been received from KSIDC as interest-free deposit	<b>1,15,930</b>

5,515 Equity Shares of Rs. 10/- each reserved for firm allotment to a person of Indian origin resident abroad for cash at par, pending clearance of the Reserve Bank of India	<b>55,150</b>
	<b>30,60,000</b>

NOW OFFERED TO THE PUBLIC FOR SUBSCRIPTION FOR CASH AT PAR  
2,94,000 Equity Shares of Rs. 10/- each

#### TERMS OF PAYMENT

On Application	per share	Rs. 2.50
On Allotment	per share	Rs. 2.50

The balance of Rs. 10/- payable in one or more instalments decided by the Directors at an interval of not less than 3 months between the calls and allotment and the notice will be given.

#### MANAGEMENT

The Company will be managed by the Directors under the supervision of Sri N. Ramanandam Director of the Board in banking, finance

Sri A. K. Thampy and Sri T. P. Chandy, respectively the Vice-Chairman and Director of the Board.

#### BOARD OF DIRECTORS

1. Sri N. Ramanandam, No. 5, Khader Nungambakka (Company Director):  
Mahindra Ugri Madura Coats Mysore Paper

2. Sri A. K. Thampy, 1-D, First Street, Nungambakka (Industrialist):  
Managing Director, The Oriental Rubber (Madras) Private

Director:  
Transformers & Southern Sea

3. Sri P. J. Thomas, "Tejasa", Vikram Trivandrum 69 (Managing Director, Kerala State Industrial Development Corporation Ltd.):  
British Physical Kerala State Industrial and others.

4. Lt. Genl. N. S. N. Appiah House, (Retired Army Officer):  
Director:  
Periyar Chemicals

5. Dr. K. Thomas, Kalaiattil House, Vellamkulam P.O. (Medical Practitioner)

6. Sri U. A. Menon, 80, Mount Union, Bombay 400 02 (Leather Technologist)

7. Sri T. P. Chandy, 265, Ranga Colony, Madras 600 07 (Director):  
The General and (Private) Ltd.  
The Madras Chamber of Commerce  
The General Ent.

#### SECRETARY

Sri P. V. Unnikrishnan, XXIX/261, Thapuvilla

#### AUDITORS

Messrs. Varna & Varghese, Chartered Accountants, "Sriniketan", Netaji

#### LEGAL ADVISER

Sri B. S. Krishnan, Advocate & Notary, Warrier Road, Cochin

#### BANKERS TO THE COMPANY

1. Central Bank of India, Mahatma Gandhi Road, Cochin  
2. United Commercial Bank, Cloth Bazaar Road, Cochin



# Vanjinad Leathers Limited

(Incorporated under the Companies Act 1956)  
Registered Office: XXIV 570, Thoundayil Lane  
Thripunithura Road, Cochin-682016

3. Bharat Overseas Bank Limited,  
Mahatma Gandhi Road, Cochin 682 011
4. The Federal Bank Limited, Kuttipuram (Kerala)
- ISSUE HOUSE**  
Messrs. Canara Company, 9, 11th Main Road,  
Malleswaram, Bangalore 560 003.

**UNDERWRITERS TO THE ISSUE**  
The entire issue now offered to public for  
subscription is fully underwritten as follows:

Name and address	Amount underwritten (Rs. in lacs)
1. Industrial Development Bank of India, New India Centre, 17, Cooperage, Bombay 400 039	5.00
2. Industrial Credit & Investment Corporation of India Limited, 163, Backbay Reclamation, Bombay 400 020	5.00
3. Industrial Finance Corporation of India, Bank of Baroda Building, 16, Parliament Street, New Delhi 110 001	5.00
4. Central Bank of India, Nariman Point, Bombay 400 021	5.00
5. Kerala Financial Corporation, Vellayambalam, Trivandrum 695 001	5.00
6. United Commercial Bank, Kaveri Building, 1st Floor, Cloth Bazaar Road, Cochin 682 011.	3.00
7. Bharat Overseas Bank Limited, "Oxford House", Mount Road, Madras 600 006	1.00
8. Vijai & Company, Stock & Share Brokers & Investment Consultants, 9, 11th Main Road, Malleswaram, Bangalore 560 003	0.40
	<u>29.40</u>

In the opinion of the Board of Directors,  
the resources of the underwriters are  
sufficient to discharge their respective  
underwriting obligations in full.

## BROKERS TO THE ISSUE

- Ahmedabad**
1. Champaklal Bhailal Chokshi,  
Manek Chowk, Near Share Bazar,  
Ahmedabad 380 001.
- Bangalore**
2. Vijai & Company, 9, 11th Main Road,  
Malleswaram, Bangalore 560 003.
3. M. Nanjappiah Jahgirdar, 205, Cavalry Road,  
Post Box No. 4271, Bangalore 560 042.
4. Satyaprakash & Co.,  
3rd Floor, Indian Bank Building,  
Kempegowda Road, Bangalore 560 009.
- Bombay**
5. Harkisondass Lakhmidass,  
Stock Exchange Building, 5th Floor,  
Bombay Samachar Marg, Bombay 400 023.
6. Batlivala & Karani, Union Bank Building,  
Dalal Street, Fort, Bombay 400 023.
7. L. K. Panday, Bank of Maharashtra Building,  
45/47, Apollo Street, Bombay 400 001.
8. Jayantilal N. Patel,  
86, Stock Exchange New Building,  
Apollo Street, Fort, Bombay 400 001
9. Jamnadas Morarjee & Co.,  
5-A, Harnam Street, First Floor,  
Post Box No. 961, Bombay 400 023.
- Calcutta**
10. Place, Siddons & Gough (Private) Limited,  
6, Lyons Range, Post Box No. 592,  
Calcutta 700 001.
11. N. L. Roy & Co., Post Box No. 2390,  
7, Lyons Range, Calcutta 700 001
- Hyderabad**
12. S. S. Sodhi, 5-9-1110/3, King Kothi Road,  
Hyderabad 500 001
13. Laxmi Narayan Rathi, 4-5-173, Hashmat Gunj,  
Sultan Bazaar, Hyderabad 500 001

- Indore**
14. Santosh & Co.,  
44, Bada Sarafa, Indore 452 002.
15. Pushkarlal Ghudawala,  
44, Bada Sarafa, Indore 452 002.
- Madras**
16. V. S. Krishnaswami & Co.,  
106, Armenian Street,  
Post Box No. 265, Madras 600 001.
17. Paterson & Co., Post Box No. 48,  
Vanguard House (III Floor),  
11/12, Second Line Beach, Madras 600 001.
- Delhi**
18. Bharat Bhushan & Co.,  
H-45, Connaught Place, New Delhi 110 001
19. H. P. Mehta & Co., Surya Kiran, III Floor,  
Kasturba Gandhi Marg, New Delhi 110 001
20. Harbans Singh Mehta & Co.,  
33, Regal Building, Parliament Street,  
P. O. Box No. 300, New Delhi 110 001.
21. Raja Ram Bhasin & Co., "Jewan Mansion",  
8/4, Desh Bandhu Gupta Road,  
New Delhi 110 055.

## BANKERS TO THE ISSUE

Central Bank of India, Mahatma Gandhi Road,  
Cochin 682 011,  
and at their main offices at Bombay, Adoni,  
Gudivada, Hyderabad, Secunderabad,  
Vijayawada, Visakhapatnam, Bangalore City,  
Avenue Road-Bangalore, Bangalore Cantt.,  
Belgaum, Hubli, Mangalore, Alleppey, Alwaye,  
Anchalmood, Calicut, Cannanore, Cochin,  
Irinjalakuda, Kallissery, Kaniyapuram, Kottayam,  
Palai, Palghat, Quilon, Kadappakkada, Ranni,  
Trichur Town, Trivandrum, Coimbatore,  
Peelamedu, Coonoor, Kumbakonam, Madras,  
Sowcarpet-Madras, Sembiam-Madras,  
Nagercoil, Salem, Tiruchirapalli, Tirunelveli Town  
and Vellore.

United Commercial Bank, Cloth Bazaar Road,  
Ernakulam, Cochin 682 011,  
and at their main offices at Cochin, Trivandrum,  
Calicut, Palghat, Calcutta, Bombay, Ahmedabad,  
Delhi and Indore.

Bharat Overseas Bank Limited,  
M. G. Road, Ernakulam, Cochin 682 011,  
and at their main offices at Bangalore, Bombay,  
Calcutta, New Delhi, Hyderabad, Madras 6  
and Madras 1.

## HOW TO APPLY

Obtain copies of Prospectus and Application  
Forms from the Registered Office of the Company  
and/or Underwriters, Brokers, Bankers  
(and their Branches) whose names and addresses  
are mentioned in the Application Form. Complete  
and sign the application forms (applications must  
be for 50 Equity Shares or multiples of 50) and  
deliver them together with cash or Bank draft or  
cheques at the rate of Rs. 2.50 per share to any of  
the Branches of the Bankers. Cheques should be  
given on banks situated in the towns where  
applications are submitted.

**OPENING DATE:**  
**22nd September, 1976**  
**CLOSING DATE:**  
**6th October, 1976**  
**BUT NOT**  
**EARLIER THAN:**  
**24th September, 1976**

Issue Managed by:  
**VIJAI & COMPANY,**  
Stock & Share Brokers & Investment Consultants,  
9, Eleventh Main Road,  
Malleswaram, Bangalore 560 003.



# The Sub-Continent: Some Pakistani Perspectives

A G Noorani

INDIA and Pakistan matter a lot to each other and far more than either would care to admit. The ties of culture and language are far stronger between India and Pakistan than between Pakistan and Bangladesh. In this respect, India occupies a unique position; for its affinities with Bangladesh are in turn stronger than those which the latter has with Pakistan. India and Pakistan have shaped each other's foreign policy in fundamental respects, each affecting the other's relationship with the great powers. Precisely for these reasons the study of Indo-Pak relations imposes severe strains on the objectivity of even the best of academicians in these countries. It will be long before revisionist schools grow in each country challenging the conventional wisdom about the origins of the Indo-Pak cold war. When it does, one should not be surprised if the revisionists, in their enthusiasm, perpetrate the errors which revisionists are prone to commit. Witness: the revisionist historians of the cold war. True objectivity lies not in avoidance of expression of opinion, but in one's approach to the evidence. It is marked by a genuine, consuming desire to understand why things happened the way they did. Such understanding is impossible without a close study of both points of view. The three books under review will be of enormous help to anyone who wishes to understand the Pakistani perspective on the relations between India and Pakistan.

The authors are scholars of high credentials. S M Burke has been Pakistan's envoy in eleven countries and is the author of a definitive work on Pakistan's Foreign Policy. G W Choudhury became head of the Research Division of the Ministry of Foreign

Affairs in 1967 and was later a member of the Pakistani Federal Cabinet. Anwar Syed is Professor of Political Science at the University of Massachusetts, Amherst. For sheer mastery of the published material on Pakistan's foreign policy, S M Burke's work remains unsurpassed. Choudhury, on the other hand, had free access to classified material and accompanied Ayub Khan to Russia in 1967 and Yahya Khan to China in 1969. He has "tapped original sources on Pakistani leaders' dialogue and dealings" with Brezhnev, Kosygin, Kennedy, Johnson, Nixon, Mao Tse-tung, Chou En-lai and others. He tells a lot and imparts valuable information. The forte of Anwar Syed's work is incisive, rigorous analysis.

## SEARCH FOR BALANCE AND PARITY

From 1947 to 1953, both India and Pakistan followed a policy of non-alignment. The Kashmir question so tore them apart that the latter altogether shed its agnosticism, driving the former to modify it in some important respects. But was Kashmir the cause of the discord or a reflection of a deeper divide? Oddly enough, none of the authors recalls a significant pronouncement by the founder of Pakistan, Mohammed Ali Jinnah, in his answers to a Reuter's correspondent's questions on May 21, 1947. "A weak Pakistan and a strong Hindustan will be a temptation for the strong Hindustan to try to dictate. I have always said Pakistan must be a viable Pakistan and sufficiently strong as a balance *vis a vis* Hindustan. I am, therefore, deadly against the partition of Bengal and Punjab and we shall fight every inch against it." Jinnah surely knew by then that partitioned these Provinces would be. The Mountbatten Plan which he accepted was published only a fortnight later. But Jinnah's pronouncement ill prepared his followers for the denouement. The consequent feeling of inferiority and deprivation was the stronger for the surprise and it was to grip the new nation and hold it in a tight embrace ever after. Pakistan sought foreign aid

to restore the "balance" its leaders had dreamt of. Bhutto gave it a new name — the plus factor — but the idea was not his creation. It was born with Pakistan.

In his first press conference as Vice President of the Interim Government on September 27, 1946, Jawaharlal Nehru said that "India will follow an independent policy, keeping away from the power politics of groups aligned one against another". In contrast, Jinnah, when asked as to on which major Power Pakistan was most likely to lean replied: "The one that will be in our best interests. It will not be a case of leaning on any Power, but we shall certainly establish friendship and alliances, which will be for the benefit of all those who may enter into such an alliance". He went on to add, "Pakistan cannot live in isolation, nor can any other nation do so today. We shall have to choose our friends and, I trust, wisely".

As G W Choudhury says, "One of the basic objectives of Pakistani foreign policy has always been to attain parity with India in politics and diplomacy if not in military might". The first opportunity for foreign help in this objective arose on May 15, 1949 when Pakistan's Prime Minister Liaquat Ali Khan was visiting Teheran. Choudhury throws a flood of light on that hitherto little-known episode: "The Soviet charge d'affaires there inquired of Begum Liaquat Ali Khan at a dinner party if she and her husband would visit the USSR; she replied that they would be receptive to an invitation. Subsequently, on June 2, the Soviet charge conveyed verbally through Pakistan's Ambassador in Teheran an official invitation to Liaquat and his wife to visit Moscow. Liaquat accepted on June 7. The Prime Minister was hailed for his acceptance by two senior political advisers, Ambassadors Raja Ghazanfar Ali Khan in Teheran and M A H Isphani in Washington". He proceeds to quote from the latter's report to Liaquat on September 7, 1949 about the remarkable improvement the invitation had brought about in the manners of US State Department officials. However Zafrulla Khan, Finance Minister Ghulam Mohammed, and Foreign Secretary Ikramullah sabotaged the move. The British were displeased and said as much. The postponement of the date for the Prime Minister's visit to Mos-

**Mainsprings of Indian and Pakistani Foreign Policies** by S M Burke; University of Minnesota Press, Minneapolis. **India, Pakistan, Bangladesh, and the Major Powers: Politics of a Divided Sub-continent** by G W Choudhury; The Free Press, New York \$ 13.95. **China and Pakistan: Diplomacy of an Entente Cordiale** by Anwar Syed; Oxford University Press, £ 3.



low and the failure to appoint an envoy to the Kremlin had the effect desired by his "powerful clique". Meanwhile, a visit to the US was arranged. Liaquat sought, first in 1949 through the British Government, a joint Commonwealth guarantee of the territorial integrity of India and Pakistan. Later, On May 5, 1950, he publicly asked the US to guarantee Pakistan's "territorial integrity" within 24 hours of his setting foot on American soil.

Choudhury laments that "Pakistan's policy of non-involvement in the East-West Cold War, a policy initiated by Jinnah and faithfully followed by Liaquat up to 1950, was coming to an end along with the American policy of non-involvement in the sub-continent". Earlier, in July 1949 a military mission to the US headed by Iskandar Mirza had failed to secure arms supplies. The State Department wanted to preserve "complete neutrality" between India and Pakistan. It was only in 1954 Pakistan became "America's most allied ally in Asia". However, "Pakistan's adherence to SEATO was due to only one person, Zafrulla Khan, who exceeded the mandate of the Cabinet and scorned the advice of the military". Choudhury reveals that Prime Minister Mohammed Ali questioned Zafrulla on this in a lengthy memorandum on September 9, 1954. The latter's defence was that any other course would have jeopardised US aid.

#### BEFRIENDING SOVIET UNION AND CHINA

This phase lasted less than a decade. Disappointed with the US for not supporting Pakistan as much as the latter desired and, after October, 1962, for arming India, Pakistan turned towards China. By September 1959 the Sino-Indian border dispute was out in the open. In November Pakistan proposed border talks to China. It is necessary to turn to Anwar Syed at this point." Bhutto claims that this was done, somewhat reluctantly, by way of testing the argument for a more cordial relationship with China which he had been pressing for some time. Manzur Qadir, on the other hand, recalled that towards the end of December 1958, two months after entering the Government as foreign minister, he prepared a position paper on Pakistan's international environment in which he argued that while Pakistan's relations with India and the Soviet Union were 'not

likely to improve significantly, those with China could: he recommended a policy of closer relations with China. The paper was presented at a Cabinet meeting. Ayub Khan did not reject the idea, but of all the ministers present Bhutto alone spoke in its favour."

How is one to reconcile all this with Pakistan's condemnation of the Chinese policy in Tibet, Ayub's proposal to India for joint defence and Bhutto's criticism on October 21, 1960 of China's "incursions" into Kashmir? It was only in 1961 that Pakistan switched its vote and began supporting China's admission into the UN. In March 1962 Peking agreed to discuss the border question. Ayub's memoirs reveal how the deal was struck. Ironically, the first American to condemn Pakistan's move was Henry Kissinger. During a visit to the sub-continent in January 1962, he said "If Pakistan were stupid enough to enter into an alliance with China, how long could she survive without a strong independent India"? Nine years later he went to Peking through Pakistan's good offices.

Pakistan also began mending its fences with the Soviet Union. The new doctrine was "bilateralism"; not quite in the sense of the Simla Pact — keeping third parties out of disputes between two countries — but in the sense that "Pakistan and each of the great powers may have co-operative relations on the basis of such mutuality of interests as may happen to exist between them, without regard to either side's relations with third parties. Thus, during the 1960s, Pakistan was able to develop relations of limited co-operation with the Soviet Union, despite the latter's pro-Indian and anti-Chinese orientations". Ayub's memoirs describe the technique he adopted in "walking on a triangular tightrope" connecting the US, the Soviet Union, and China. He was well aware of the limitations. "No bilateral equation could be established in isolation; other equations would influence its level. In the end each equation would be determined by the limits of tolerance of third parties". Ayub sought to avoid a total break with any of the three powers. He could scarcely avoid the strains inevitable in any triangular relationship whether between individuals or states.

Pakistan began cultivating Russia about the same time as it made overtures to China. Soviet-Pak relations had reached the nadir as a result of

the U-2 incident in 1960. Ayub began to ask himself whether the total commitment to the West suited Pakistan's national interests. Russia, he it noted, had made it clear to Pakistan as early as 1964 that it could not be expected to worsen its relations with other countries — India or Afghanistan — in its quest for better relations with Pakistan. Bilateralism was a game two could play. The real breakthrough in Soviet-Pak relations came only during Ayub Khan's visit to Moscow in April 1965, the invitation for which had been extended in June 1964 well before Khrushchev's fall. The ground-work was done during the Soviet deputy foreign minister Lapin's visit to Pakistan in November, a visit which was returned by Bhutto in January. Bhutto was at pains to emphasise Pakistan's "independent" foreign policy and cited in support of this claim its disagreement with the US policy in Vietnam and — it bears recalling in 1976 — Pakistan's opposition to the presence of the US Seventh Fleet in the Indian Ocean. Ayub Khan's visit to Moscow brought Pakistan and Russia much closer. In May 1965 the Soviet Union remained neutral in the Indo-Pak dispute over the Rann of Kutch, but the September was to liberate Kashmir was of course another matter.

#### 1965 WAR

Anwar Syed tells us how it all began. "The following information, not generally available at the time and conveyed to me by Prime Minister Bhutto and senior Pakistani diplomats in recent interviews, may be of some interest. During a meeting in 1965, Chou En-lai, after hearing Ayub Khan's discourse on Kashmir, is said to have observed that a 'just' settlement of the dispute would not materialise unless Pakistanis were willing to make 'sacrifices'. When Chen Yi stopped at Karachi on September 4, he was told that Pakistanis were now ready to make sacrifices! At the same time, Pakistani diplomats emphasise that the Chinese have never encouraged Pakistan to go to war with India. Nor have they endorsed the idea of such a war as a means of reactivating lagging world interest in the Kashmir dispute. Prime Minister Bhutto and his colleagues are inclined to interpret Chou En-lai's reference to the necessity of making sacrifice policy recommendation. They add that the Chinese had not been consulted before the Government of



Pakistan made the decision to send 'freedom-fighters' to the Indian side of Kashmir. In fact, hardly any of Ayub Khan's Ministers or other high officials — beyond Bhutto, General Akhtar Malik (who trained the 'freedom-fighters' and apparently not so well), and a few other generals — knew of the plan. When, after a few days of the Indian invasion, the war entered a stalemate so that Pakistan ammunition stocks were being depleted without making a significant impact on the battlefield, President Ayub Khan 'frantically' appealed to the Chinese to 'do something'. After the Chinese sent an ultimatum to India, the American and British Ambassadors advised him that the Chinese action might lead to a general, and possibly nuclear, war. Unwilling to risk a break with the United States, and unnerved by the thought of a larger war, Ayub Khan now appealed to the Chinese to withdraw the ultimatum.'

G W Choudhury's account is even more well-informed. In preparing his account of the war he "read, most carefully, minutes of the wartime discussions between Ayub and Bhutto and the Chinese Ambassador to Pakistan; between Chou and Liu and the Pakistani Ambassador to China; between Ashgar Khan and Chinese leaders; and between Ayub — who, like Ashgar, flew to Peking in the heat of crisis — and Mao, Chou, Liu, and Chinese military chiefs. After his retirement in 1969, I questioned Ayub at length about his secret mission in China. I read the diplomatic cipher messages exchanged daily between Peking and Rawalpindi during the war. As a member of the Cabinet (1969-1971), I conducted lengthy interviews with the top Pakistani military and civilian leaders who made the war's crucial decisions".

According to Choudhury, on September 7, "Chou sought two assurances from Ayub: that Pakistan would not submit to any Kashmiri solution favourable to India, and that Pakistan would not submit to US, Soviet, or UN pressures for such a solution; Ayub cabled these assurances. In a September 8 letter to Ayub, President Liu reaffirmed China's support, making it clear that China would respond to an Indian attack on East Pakistan not only there but also in the north. On September 12, Pakistani Air Marshal Asghar Khan was instructed to inform the Chinese Government of the 'type of military

intervention' that might be required if the war developed further... I do not know whether China concurred in it, but by this critical juncture Pakistan's top military men had formulated the following contingency plan for a joint blitz on India: Seeking to gain for Pakistan a superior position at post-war negotiations by grabbing territories and inflicting humiliation on India, China would occupy a big chunk of Indian land in the North-East Frontier Agency, while Pakistan, with much of the pressure thus siphoned off from the West, would drive from the West Pakistan frontier". Sino-Soviet relations had not then deteriorated to the point that Moscow would be prepared to take direct action against Peking.

What foiled Pakistan's plans then and prompted Ayub to slip into China secretly, Choudhury reveals, in order to consult it before accepting a ceasefire and to secure China's withdrawal of the ultimatum of September 16? Neither Choudhury nor Anwar Syed refer to Russell Brines' disclosure that on September 14, US Ambassador John M Cabot had told the Chinese representative at the Warsaw talks "to stay out of the Indo-Pakistani conflict; otherwise, he implied, that the US and other UN nations would retaliate against China". ("Indo-Pakistani Conflict"; Pall Mall, London, 1967, p 373.) S M Burke also mentions the American warning. On March 15, 1966, Bhutto claimed in Parliament that China had warned India, through the US representative at Warsaw not to attack East Pakistan — only. This would seem to contradict Choudhury's suggestion that China "would have stood by Pakistan in any case". The more plausible explanation is that after the American warning it suited both to back down. Nor was America alone. The reference to "other UN nations" is a transparent euphemism for the Soviet Union's co-operation with the US in the undertaking.

The war proved ruinous to Ayub's leadership and, more consequentially, to Pakistan's nationhood. If East Pakistan was saved by China's guarantee as Bhutto suggested why could not its leaders develop relations with Peking independently of Rawalpindi?

#### ROLE OF SOVIET UNION

It is a measure of Russia's confidence in its growing influence in the councils of Asia that in 1969 it proposed a regional grouping for trade and transit

facilities (the Kosygin Plan), and a system of collective security in Asia (the Brezhnev Plan). Choudhury confirms the common impression that at one stage Pakistan did accept the former. When Kosygin met Yahya Khan in Pakistan in May 1969 he proposed a conference of India, Pakistan, USSR, and Afghanistan at the deputy foreign minister level "to discuss the question of transit trade". Iran and Turkey could also join. Yahya, "a simple man and a novice in diplomatic dialogues with a major power", accepted the conference proposal but the Foreign Office, alarmed that China would be offended, induced second thoughts in him. Choudhury reveals that "Following a Moscow conference of Soviet envoys, the Ambassador to Pakistan called on Yahya as well as the Pakistan Foreign Secretary to try to sell the Brezhnev scheme. He described the proposed plan in lofty terms, stressing such features as 'non-interference in internal affairs of signatory countries' and 'economic, cultural and scientific co-operation'. The Ambassador pointed out to the Foreign Secretary 'the inadequacy of economic collaboration' under SEATO and CENTO in contrast to the more worthwhile collaboration under the Soviet plan. But upon being questioned about security aspects of the plan, the Soviet Ambassador had to reveal its main purpose, which had to do, not with economic co-operation, but with China. The specifics of the proposed security agreement also made this plain. For example, the signatories would not enter into any alliance, formal or informal, with a third country that might be hostile to any member countries, nor should they 'make any commitment inconsistent with the proposed Asian Security Plan'; in addition, the signatory countries 'will consult each other in case of an aggression by a third party'. The anti-China slant was also indicated by the fact that Brezhnev announced the plan only three months after the most serious armed conflicts to date on Sino-Soviet borders; the chances of a full-scale Soviet attack on China could not be ruled out, and there was speculation, not entirely baseless, that the Soviets might strike at the Chinese nuclear installations. Moreover, if the proposed security plan could be used against a nation that Pakistan considered a friend, it apparently could not be used against Pakistan's true enemy. Yahya wanted to know what help, if any, the



Brezhnev plan would offer 'in case of an aggression committed by one member country against another' — such as would be the case in a repetition of the 1965 Indo-Pakistani war. The answer was as evasive as it was rhetorical: 'The Asian Security Plan will put an end to such regional conflicts which the Imperialist countries like US and expansionist ones like China encouraged'."

It is unlikely, however, that Russia stopped arms supplies to Pakistan because it turned down the Brezhnev Plan. No Asian nation has accepted it, bar Outer Mongolia. More likely than not, the Soviet Union was angered by Pakistan's *volte face* on the Kosygin Plan and its increasingly close links with Peking. The Russians "sought to establish a radio relay communication centre near the site of the former American Badabar base". Interestingly, Anwar Syed quotes Pakistani diplomats as saying that in 1969 Moscow wished to establish, through Afghanistan, a road link with the Pakistani port of Gwadar, situated at the entrance to the Persian Gulf. Soviet help to develop Gwadar into a major port was also offered.

#### RELATIONS WITH CHINA

It all came to nothing. The interregnum between the two wars was spent, as before, in the quest for allies. Relations with the Soviet Union reached a peak in 1968 when it agreed to give arms to Pakistan and then tapered off. Those with the US registered a distinct improvement around 1970. It was largely due to Pakistan's mediation that Kissinger was able to visit Peking and Sino-US relations improved. But to what end? It alarmed India and alienated the Soviet Union. As Choudhury says, "China and the United States are no doubt appreciative of Pakistan's role in bringing them together. But some Pakistani diplomats submit that this role may have contributed to her defeat and dismemberment later the same year. The Soviet Union is said to have been greatly angered by the fact that Pakistan helped her two great adversaries travel towards detente. The fact of this detente, and in India's case also the manner of its coming about, alarmed Moscow and New Delhi and hurried them toward treaty of 'friendship' including mutual defence assistance provisions".

China served notice fairly early that it would not intervene militarily to help

Pakistan in the Bangladesh conflict. The authors have not drawn on the minutes of the conference of Pak envoys held in Geneva on August 24-25, 1971 presided over by Foreign Secretary S M Khan (See *Frontier*, October 30, 1971 for the text), during which Ambassador K M Kaiser reported that he was "not sure about the nature of Chinese help" in the event of a war with India. According to Choudhury, Bhutto "did not report faithfully to Yahya" on the failure of his aid mission to China in November 1971. The assertion is based on Yahya's evidence before the Judicial Commission set up by Bhutto after Pakistan's defeat. But Anwar Syed's version differs. True, Bhutto publicly pronounced his mission a "complete success" and Yahya announced on November 8, that in the event of war with India, China would intervene. But, Anwar Syed writes, "on the basis of my interviews with Pakistani officials, I would submit that in private conversations with visiting Pakistani dignitaries on this and a previous occasion the Chinese had made it quite clear that they were not in a position to intervene in an Indo-Pakistan war or provide military assistance sufficient to repel a Soviet-backed Indian offensive. They urged Pakistan to avoid war with India and, if it could not be averted, to contain it in as small an area as possible. Pakistani diplomats assert also that these Chinese representations were conveyed to Yahya Khan in no uncertain terms. But note that beyond these private communications, some public indications of the Chinese position were also available. Chou En-lai, while present, did not speak at the banquet for Bhutto. Nor is it without significance that during Bhutto's two days in Peking he was taken to see the underground shelters the Chinese had built for protection from a possible Soviet attack".

However, the Sino-Pak understanding continued to prosper. By 1973 China's total military aid to Pakistan was estimated to have equalled that provided by the US from 1954 to 1965. The bid for parity too goes on, according to Choudhury. "My reports from reliable Pakistani sources indicate that the country will desperately attempt to attain nuclear parity with India. Never satisfied with Indian assurances of peaceful intent, such as those India used to give Canada and other countries that aided its nuclear programme, Pakistan initiated a nuclear contingency plan in 1964".

#### PARITY WITH INDIA: IS IT EVER POSSIBLE?

A nation's quest for security is understandable. But if pursued without regard to the realities, it can be self-defeating and bring about the very situation which it seeks to avoid. According to Anwar Syed, "None of the great powers is likely to guarantee Pakistan's security". South Asia is not an area engaging America's vital interests. Of all the great powers, "China alone has a lively sense of stake in Pakistan's continued existence as an independent state in Southern Asia", but is inhibited by fears of Soviet attack and "Pakistani policy makers cannot assume that in the event of another Indo-Pakistan war the Chinese will intervene in their behalf". Anwar Syed advises Pakistanis "to do their part in ending the politics of confrontation with India. For instance, they will have to leave it to the Indian Muslims and Kashmiris to work out their own destiny". The two-nation theory should be discarded. It only serves as an "ideology of confrontation with India". What Pakistan needs is "an egalitarian ideology that would give her diverse people a powerful state in remaining united in a common nationhood... In Pakistan participatory and egalitarian urges were denied for a long time on the reasoning that a foreign enemy stood at the door. But the more these urges were neglected and, consequently, national cohesion weakened, the greater the potential for foreign intervention and pressure became. In other words, domestic repression and foreign pressure interacted in something like a vicious circle. This problem persists: reference has already been made to the existence of separatist movements in Baluchistan and the North West Frontier Province and related external pressures. One does not have to choose between domestic and foreign policy approaches to the problem of national security. But the question of focus is relevant. A Pakistani policy of limited accommodation with India and the Soviet Union, not inconsistent with her relationship with China, may reduce the dimensions of her security problem and thus reduce the imbalance between her ends and means. But such a corrective would be all too transient if the domestic resource base continued to erode, making the scale of means progressively lighter. In the long run, no amount of concession to the foreigner will ensure Pakistani security and independence if domestic cohesion and



a national resolve to defend and maintain her territorial integrity are wanting".

The internal cohesion so essential for a sound foreign policy cannot be achieved unless Pakistan's leaders discard their out-moded and unreal concept of security. Parity with India is an impossible goal because its very pursuit will drive India to yet greater effort. The diplomacy of the arms race will be scarcely less harmful in its consequences than the arms race itself. There are signs that the world outside has had enough of the sub-continent's squabbles. Anwar Syed avers that the Chinese do not wish to control the development of Pakistan's relations with India. "In this connection, certain observations Prime Minister Bhutto made during my interview with him on November 4, 1973, should be of considerable interest. He stated that as a result of a series of long meetings with Premier Chou En-lai before and after the Indian victory in East Pakistan, the Pakistani Ambassador in Peking at the time, K M Kaiser, an East Pakistani who defected to Bangladesh in the spring of 1972, was able to persuade the Chinese leader that the problems of the sub-continent would be best resolved, and presumably the Chinese interests safeguarded, if Bangladesh, India, and Pakistan were not only to make peace but to come together in some sort of a 'commonwealth'. Chou En-lai conveyed Kaiser's idea to Zulfikar Ali Bhutto in approving terms. The latter responded by despatching Aziz Ahmad, his chief foreign policy aide, to Peking, where, after four hours of plain speaking, he was able to rid Chou En-lai 'this preposterous idea'."

But Pakistan's leaders might do well to recall that while Jinnah propounded the principle of a balance *vis-a-vis* India, he also mentioned in the Reuter interview cited earlier: "I do envisage an alliance pact or treaty between Pakistan and Hindustan in the mutual interest of both and against any aggressive outsider". A friendly India was to him an essential element in Pakistan's security system. The policies which he and his successors pursued ensured anything but that while much of what India did occasionally served only to sustain Pakistan's image of a hostile India.

#### THE FUTURE

But one significant difference from

the past deserves to be noted. Unlike all his predecessors, Bhutto's orientation is not sub-continental. In his view propounded in a signed article published on April 20, 1976 on the eve of the RCD summit, "Iran, Pakistan and Turkey constitute a single civilisation" which, he urged should find expression in a regional organisation. He would "add a new dimension to the Charter of the RCD" in the belief that "economic collaboration without political and security arrangements is chimerical".

Is this but another effort to seek a "balance" with India? The reference to the "hegemonistic ambitions of even regional powers" suggests precisely that. But the article reveals also a conscious, deliberate plan to mould an "Iranian-Turkish-Pakistani community". A further clue to Bhutto's motivation might be had in his speech delivered at the Staff College, Quetta on April 7, 1976, wherein the strategic considerations are clearly predominant. "Whenever the question of Pakistan's security interest comes up for discussion or comes under scrutiny, somehow or the other, there is always a tendency to look upon the security of my country in relation to India". The world, he complained, did not have "a correct perspective in understanding our security requirements" and proceeded to explain "the strategic importance of Pakistan in terms of Asia, the Middle East and Southern Europe".\*

Pakistan will find itself diplomatically in a none too strong a position *vis-a-vis* India if it embarks on a policy of confrontation. Neither of its two powerful friends, China and Iran, would approve of it. Significantly a *Hsinhua* commentary of August 25 1976 mentioned approvingly not only the improvement in Pakistan's relations with Afghanistan and Bangladesh but with India, as well. It accords with the "desire of the people concerned and the people of other Third World countries" among whom China counts itself. It is the superpowers who "divide the Third World" and "make use of the history-oriented problems between certain South Asian and other Third World countries to create or

widen conflicts, despite the fact that there is no conflict of fundamental interests among the latter."

Thus India has little reason to be discomfited by all these developments. The "Iranian-Turkish-Pakistani community" is unlikely to share Bhutto's objectives. Neither Iran nor Turkey has reacted too enthusiastically to the idea. Relations between Iran and India could not be more cordial. And therein lies a lesson for India. The Indo-Iranian understanding became possible only when the Shah of Iran was convinced that charges of India's hegemonic designs were groundless. In the course of his talks with the Indian Foreign Minister in July 1973, the Shah of Iran is reported to have hinted that the only problem between his country and India was his fear of Indian attack on Pakistan. To remove this fear, India offered to join Iran and "other concerned powers" in any agreed arrangement "to guarantee the sovereignty and territorial integrity of Pakistan". (*New Wave*, July 29, 1973.) Eventually, no guarantee was formally given but Iran accepted India's assurance completely. India needs to bring this home to the Government and the people of Pakistan as well; constantly, by word and by deed, and in its own interest.

India's proper concern should be its own security. So long as Pakistan does not disturb the military balance so as to affect India's security or interfere in its internal affairs, India ought not to be bothered in what direction Pakistan orients itself in order to acquire a sense of identity. But if the Indian hawk must revise his notions, the doves too must stop deluding themselves that once Pakistan is assured of its security, its relations with India will be closer than with any other country. Pakistan is as afraid of the affectionate embrace as of the forcible one. It wants to be *different* from India. When, shortly after the Simla Agreement, Bhutto told the National Assembly on July 14, 1972, "We cannot get out of the sub-continent, we cannot change geography", he was emphasising merely the inescapable physical links between India and Pakistan and the need for "some method of living together, some *modus vivendi*", and not an *entente cordiale*.

\* The writer is indebted to Rajendra Sareen, Editor of *Public Opinion Trends Analyses and News Service*, New Delhi, for the texts of the article and the speech.



# Variations in Extent and Forms of Agricultural Tenancy—I

## Analysis of Indian Data across Regions and Over Time

Pranab Bardhan

*This paper brings together data on tenancy and distribution of ownership and operational holdings, on unemployment and wage rates, on credit market conditions and on various agronomic conditions.*

*Section II of the paper attempts to relate the regional variations in the extent of tenancy to differences in (a) intensity of irrigation, (b) fluctuations of rainfall, (c) labour-intensity of crops, (d) degree of landlord's monopoly power in the land market, (e) unemployment of landless labour, and (f) imperfections in the credit market. A number of hypotheses on the impact of these factors on tenancy are tested econometrically.*

*Section III similarly tests hypotheses about factors governing the regional variations in forms of tenancy, particularly in the relative importance of share-cropping vis-a-vis tenancy contracts with a fixed rent per acre.*

*Section IV examines the size-distribution of tenants. The author discusses, in particular, the regional variations in the size-distribution of tenants and whether technological and economic factors may explain these variations.*

*The last Section V observes the nature of changes in the extent and form of tenancy over the last two decades, particularly how tenancy contracts are being reshaped by the forces of agricultural progress with special reference to those regions which have achieved a significant breakthrough in production in recent times.*

*The article is published in two parts. Sections I, II and III appear below and Sections IV and V will be published next week.*

### I

#### Introduction

THE nature of tenancy contracts in a peasant economy depends not merely on the conditions in the land market but also on the conditions in related markets, particularly of wage labour and credit. Most of these markets are highly imperfect and the degrees of imperfection themselves are sometimes crucially inter-linked. Keeping this in view, we have put together in this paper the Indian inter-regional data on tenancy and distribution of ownership and operational holdings from Land Holdings Surveys of the National Sample Survey (NSS), data on unemployment and wage rates from Agricultural/Rural Labour Enquiry Reports, data on credit market conditions from the Reserve Bank of India Reports and on various agronomic conditions from the data reported by the Ministry of Food and Agriculture. Given these data sources, the emphasis here is obviously on deciphering broad patterns on a macro level<sup>1</sup> and interpreting them in terms of a simple analytical framework. An alternative approach, much

richer in the complex diversity of details it captures but less amenable to a unifying analytical framework and less "representative" as a portrayal of the aggregative picture for the country as a whole, has been that of intensive micro-surveys of contractual relationships in selected villages.<sup>2</sup> At the present state of our knowledge, both approaches are useful in their own ways.

In Section II of the paper we shall try to relate the regional variations in the extent of tenancy to differences in (a) intensity of irrigation, (b) fluctuations of rainfall, (c) labour-intensity of crops, (d) the degree of landlord's monopoly power in the land market, (e) unemployment of landless labour, and (f) imperfections in the credit market. A number of hypotheses on the impact of these factors on tenancy will be tested econometrically. Section III will similarly test hypotheses about factors governing the regional variations in forms of tenancy, particularly in the relative importance of share-cropping vis-a-vis tenancy contracts with a fixed rent per acre. In Section IV we shall look into the size distribution of tenants. In particular we

shall try to comment on the regional variations in the size distribution of tenants (how in some regions the typical tenant is a small cultivator, whereas in other regions the tenant is a big farmer) and see if technological and economic factors may explain these variations. In the last Section V, we shall observe the nature of changes in the extent and form of tenancy over the last two decades, particularly how tenancy contracts are being reshaped by the forces of agricultural progress with special reference to the regions in India which have achieved a significant breakthrough in production in recent years.

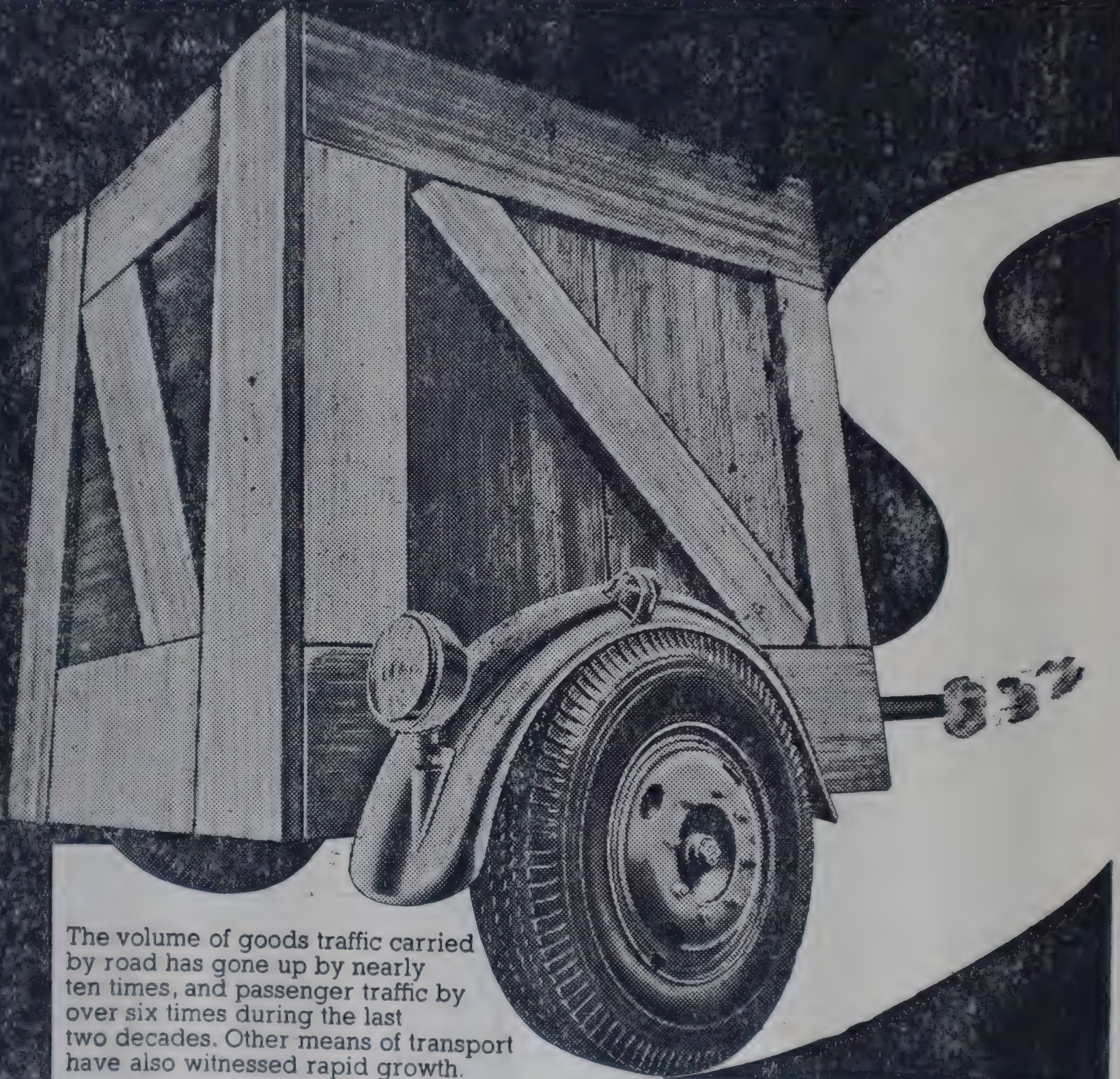
### II

#### A Model of Tenancy and Comparative Statics

Before we come to the data let us briefly describe the simple theoretical framework in terms of which the empirical investigation of this Section will be carried out. There are two seasons in the crop cycle: season 1 for land preparation, sowing, inter-culture, etc, and season 2 for harvesting. Land



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and labour (and, in one variant of the model, fertilisers) produce "saplings" at the end of season 1; "saplings" and labour produce crop output at the end of season 2. There is thus complementarity in production in the two seasons. The seasonal distinction is particularly important from the point of view of the conditions in the various input markets. Take, for example, the labour market. Season 1 also happens to be in part what is known as a "lean" season. In this season the market wage rate does not clear the labour market and there is unemployment. On the other hand, in season 2, which coincides with the "peak" season, there is full employment and the wage rate is competitively determined.

The seasonal distinction is also important because of the nature of credit market. The landless tenant is dependent on the landlords for credit to finance his subsistence consumption in the lean season and he pays back the loan along with interest at the end of the harvest. Since the interest rates are usually very high, it matters a great deal as to how long one has to wait until income accrues. For example, the landless tenant knows that as a wage labourer (provided he is lucky to get employment) he can get some wage income immediately in season 1, whereas as a tenant he has to wait until the crop is harvested in season 2. The landlord also notices that if he increases his hiring of labour in season 1, he thereby reduces the credit needs of his borrowers.

In the land (lease) market we assume that there is a conventional (commonly 50:50) crop share and at that rental rate the landlord decides how much land to lease out to sharecroppers. The latter do not participate in this decision. This reflects some monopoly power on the part of the landlord, which is not unrealistic in the general Indian context of acute tenurial insecurity, heavy demographic pressure on land and a highly skewed distribution in its ownership.

Suppose  $Q(BA, L)$  is the number of "saplings" produced at the end of season 1 on the landlord's farm. In this production he uses  $L$  amount of labour (entirely hired) and  $\bar{A}$  amount of land acreage.  $B$  is a land-augmenting improvement factor.<sup>3</sup> The total area owned by the landlord,  $\bar{A}$ , is given, and out of this he leases out

$A_t$  and  $A (= \bar{A} - A_t)$  is what remains with him for cultivation.  $Q_t(BA_t, L_t)$  is similarly, the number of "saplings" produced at the end of season 1 on the sharecropping tenant's farm and  $L_t$  is the amount of labour the sharecropper uses on his farm in season 1. For simplification we assume that the "saplings" production functions,  $Q$  and  $Q_t$  are similar and both display constant returns to scale with changes in effective acreage and labour.

Notice that we have used the same land-augmenting factor  $B$  in both the production functions. To the extent the land improvement term refers to natural fertility factors, we are assuming that the land on the landlord and the tenant farms is homogeneous with respect to soil rating, rainfall, evapotranspiration rates, etc. To the extent the land improvement factor is due to irrigation, in many parts of India the major source of effective irrigation is public canals and assuming the same  $B$  implies that both the tenant and the landlord have equal access to canal irrigation. To the extent the land-augmenting technical progress is due to adoption of high-yielding varieties of seeds, etc., assuming the same  $B$  implies that both the tenant and the landlord have equal access to the seeds and to the requisite knowledge. Later we shall comment on the cases where there are landlord-tenant differences in the land-augmenting improvement factor due to unequal access either to irrigation facilities (the insecure tenant may be uninterested in digging field channels or investing in tubewells) or to new varieties (due to, say market imperfections particularly in credit).

With the use of harvesting labour "saplings" produce output, say, in fixed proportions; let us suppose one unit of "saplings" ends up in one unit of crop harvest. We can now write the landlord's income at the end of the crop cycle as

$$Y = [1 - \beta w_2] Q(BA, L) + rQ_t(BA_t, L_t) + iC - (1+i)w_1L \quad (1)$$

In equation (1)  $r$  is the conventional cropshare;  $i$  the interest rate (per season)  $w_1$  is the given wage rate in season 1 and  $w_2$  is the competitively determined wage rate in season 2,  $\beta$  is the amount of harvesting labour used per unit of "saplings",  $C$  is the given subsistence consumption of the

tenant family that the landlord finances with credit. The landlord has thus three sources of income: rental income from leased-out land, income from self-operated land net of wages paid in seasons 1 and 2, and interest income. There is only one final commodity in this model and all rental, wage or interest payments are in terms of this commodity.

The tenant's income at the end of the crop cycle is given by

$$Y_t = (1-r)Q_t(BA_t, L_t) + (1+i)w_1v(1-L_t) + w_2(1-\beta Q_t) - (1+i)C \quad (2)$$

As we have indicated before, in lean season 1 the wage rate  $w_1$  does not clear the labour market. In that season the tenant is prepared to supply  $(1-L_t)$  amount of wage labour but expects only a fraction,  $v$ , of it get wage employment on the landlord farm and the rest is unemployed. In both seasons the total number of potential workers in the tenant family is given at unity. It is assumed for simplification for the time being that the tenant does not own any land of his own. The landlord maximises  $Y$  with respect to his decision variables,  $A_t$  and  $L$  (assuming that he cannot control the tenant's use of labour intensity *per acre* on the tenant farm) and gets the necessary conditions of interior maximum as follows:

$$r \frac{Q_t}{A_t}(a_t) - [1 - \beta w_2] q'(a) = 0 \quad (3)$$

$$[1 - \beta w_2] [q(a) - q'(a)] - (1+i)w_1 = 0 \quad (4)$$

Where  $q$  and  $q_t$  are the average productivities of labour in season 1

and  $a (= \frac{BA}{L})$  and  $a_t (= \frac{BA_t}{L_t})$

are the effective land-labour ratios in season 1 on the landlord and tenant farms respectively. If marginal productivity of each factor is diminishing, the Jacobian,  $J$ , of equations (3) and (4) is positive and the second-order conditions of maximisation are satisfied.

The tenant maximises his income  $Y_t$  with respect to his only decision variable  $L_t$  and gets as a necessary condition of interior maximum:

$$v(1+i)w_1 - (1-r-\beta w_2) [q_t(a_t) - q'_t(a_t)] = 0 \quad (5)$$

Note that in the interior  $(1-r-\beta w_2)$  has to be positive (which is generally



TABLE 1 : INTER-STATE SHARE-CROPPING AND OTHER DATA FOR INDIA IN EARLY 1950s

States	X <sub>1</sub>	X <sub>2</sub>	X <sub>3</sub>	X <sub>4</sub>	X <sub>5</sub>	X <sub>6</sub>	X <sub>7</sub>	X <sub>8</sub>	X <sub>9</sub>
UP	54.17	28.90	25.3	61	59	25.91	63.34	31.46	11.38
Bihar	68.47	55.72	28.8	63	107	17.66	66.32	17.15	12.39
Orissa	60.28	64.55	13.6	54	60	12.89	48.89	40.37	12.58
West Bengal	89.57	78.49	28.0	81	111	18.65	58.47	47.54	25.43
Assam	22.64	76.02	30.4	56	82	20.54	19.37	4.64	43.54
Andhra	43.05	29.15	na	na	na	26.47	53.54	68.97	19.07
Madras	21.54	38.15	14.4	60	145	24.61	40.64	21.93	27.53
Mysore and Coorg	24.72	33.13	14.7	65	98	13.01	47.01	51.94	16.37
Travancore and Cochin	9.70	30.24	25.6	61	108	27.80	30.00	3.85	23.63
Bombay	48.95	9.18	17.6	45	190	5.46	23.01	28.82	26.81
Saurashtra and Kutch	18.13	0.93	28.8	84	126	3.22	26.20	25.69	6.22
Madhya Pradesh	64.03	27.06	14.4	37	90	5.36	16.08	26.88	18.61
Madhya Bharat	37.06	2.34	18.6	57	123	4.62	46.32	6.81	19.54
Hyderabad	40.11	7.18	14.4	57	110	5.16	40.77	57.20	18.04
Vindhya Pradesh	17.91	28.08	na	68	na	4.52	41.49	9.00	21.33
Rajasthan and Ajmer	23.21	5.14	20.0	57	119	11.23	39.05	17.98	20.92
Punjab (including Delhi and Himachal Pradesh)	76.89	9.09	39.8	59	226	34.82	48.09	49.52	40.42
PEPSU	56.25	3.92	58.2	66	171	41.03	28.37	32.88	37.71
Jammu and Kashmir	67.31	29.37	25.6	na	175	39.03	33.29	75.38	22.17

Notes : X<sub>1</sub> is the percentage of cultivated area under tenancy and X<sub>2</sub> is area under share-cropping as percentage of area under share-cropping and fixed-rent tenancy in 1953-54, as estimated from the National Sample Survey 8th Round data. X<sub>7</sub>, which is the percentage of leased-in area under contracts in which the tenant may be evicted at will, and X<sub>8</sub>, which is the percentage of total leased-out area accounted for by non-cultivating owners, have the same source of data as X<sub>1</sub>. X<sub>2</sub> is the proportion of total cropped area that is under rice, *ragi*, barley and jute in 1952-53 and the source is the Ministry of Food and Agriculture data. From the same source we have X<sub>6</sub>, the percentage of gross sown area irrigated in 1952-53. X<sub>3</sub>, the harvesting wage rate per day (in annas) for males in agricultural labour households in 1950-51 and X<sub>5</sub>, the number of days unemployed in the year 1950-51 for male workers in agricultural labour households, are both from the Report of the First Agricultural Labour Enquiry. X<sub>4</sub>, the percentage of total annual borrowing by small cultivators that is taken to meet household expenses, relates to 1951-52 and is from the All-India Rural Credit Survey Report.

the case with  $r$  at 50 per cent and  $\beta w_2$  — the share of harvest paid as wages — is usually not more than 10 per cent). This implies in equation (3) that

$$\frac{q_t}{a_t}(a_t) > q'(a) \quad (6)$$

Note that (6) is consistent with  $a_t \geq a$ .

In this model the standard Marshallian disincentive effect of share-cropping tends to raise  $a_t$  above  $a$ , but the effect of unemployment is to lower it.

In peak season 2 there is full employment so that

$$\beta Q(BA, L) = 1 - \beta Q_t(BA_t, L_t) \quad (7)$$

where the left-hand side represents the demand for wage labour for harvesting on the landlord's farm and the right-hand side the corresponding supply. Equation (7) determines the equilibrium harvesting wage rate,  $w_2$ . We shall assume this equilibrium to be stable.

Given this basic model, we shall now work out some comparative static propositions with parametric variations. Varying the land-augmenting improve-

ment parameter  $B$ , we can prove that  $\frac{dA_t}{dB}$  is positive under the sufficient conditions that the elasticity of substitution does not exceed unity and that the labour-elasticity of output on the share-cropper's farm in the lean season is small enough, which are not unrealistic to assume for a peasant economy. So we derive our proposition (A): *The percentage of area under tenancy will be higher in areas where the land improvement factor is larger (i.e., soil fertility, rainfall, irrigation, etc., is better).* This result holds even if the landlord and the tenant have unequal access (or incentive) to land improvement.

Suppose, however, that land-augmenting technical progress (say, in the form of high-yielding varieties of seeds) requires the purchase of some current inputs or services (like chemical fertilisers, water from tubewells or renting the service of a pumpset) and the market for the latter is imperfect (maybe because the landlord has better "connections" and access to the government subsidised distribution of fertilisers or because the landless

tenant has fewer channels of cheap credit open to him with which to buy these inputs) so that the landlord has differential advantage over the tenant. In this case it is easy to prove our proposition (B): *The larger is the degree of imperfection in the market for inputs complementary with high-yielding variety of seeds (or in the market for credit to buy these inputs with), the lower is the percentage of area under tenancy.*

Now varying the parameter  $\beta$ , we find that  $\frac{dA_t}{d\beta}$  is positive. So we get

proposition (C): *The larger is the labour-intensity of the crop harvested, the higher is the percentage of area under tenancy (alternatively, if there is a labour-saving technical change reducing the harvesting labour requirement — say, through the introduction of harvesters — tenancy will decline).*

Varying interest rate  $i$ , we get  $\frac{dA_t}{di}$  negative if the labour elasticity of output of "sapling" is small enough. This gives our proposition (D): *The percentage of area under tenancy will*



TABLE 2 : INTER-STATE SHARE-CROPPING AND OTHER DATA FOR INDIA IN EARLY 1960s

States	X <sub>1</sub>	X <sub>2</sub>	X <sub>3</sub>	X <sub>5</sub>	X <sub>10</sub>	X <sub>11</sub>	X <sub>12</sub>
Andhra Pradesh	37.70	28.1	1.18	16	0.25	61.1	31.04
Assam	67.05	75.1	2.40	16	0.28	36.1	79.57
Bihar	83.60	50.1	1.49	68	0.78	59.6	66.32
Gujarat	41.97	5.6	1.30	43	1.13	5.3	12.64
Jammu and Kashmir	61.49	30.3	2.26	93	na	7.0	64.60
Kerala	17.70	33.6	1.98	102	0.11	8.0	69.53
Madhya Pradesh	48.88	23.5	1.15	26	0.58	34.0	35.66
Madras	28.87	38.6	1.39	103	0.38	53.9	53.50
Maharashtra	23.88	8.0	1.40	31	0.63	16.8	17.91
Mysore	37.52	18.3	1.06	43	0.38	43.0	15.63
Orissa	52.71	64.4	1.41	40	0.68	15.1	64.56
Punjab	65.39	6.2	2.62	27	0.49	33.5	50.06
Rajasthan	26.72	5.0	1.73	40	0.54	24.0	16.26
U P	62.67	28.4	1.49	34	0.52	35.0	41.19
West Bengal	92.53	77.3	1.82	36	0.50	24.7	79.69

Notes : X<sub>1</sub> is the area under share-cropping as percentage of area under share-cropping and fixed-rent tenancy in 1960-61, as estimated from National Sample Survey 17th Round data. X<sub>2</sub> is the percentage of total cropped area that is under rice, *ragi*, barley and jute in 1961-64 and the source is the Ministry of Food and Agriculture data. The same Ministry has a publication on "Growth Rates in Indian Agriculture", from which we have taken X<sub>10</sub>, the standard error of linear rates of growth of agricultural productivity during 1952-53 to 1964-65. X<sub>3</sub> is the harvesting wage rate (in Rs) per day for male casual labourers in rural labour households in 1964-65, as in the Report of the First Rural Labour Enquiry 1963-65. From the same source we have got X<sub>5</sub>, the average number of days in a year not worked due to want of work by usually occupied men in agricultural labour households. X<sub>11</sub> is the percentage of all cash loans of rural households borrowed from landlords and agriculturist money-lenders in 1961-62 as from the All-India Rural Debt and Investment Survey. For X<sub>12</sub>, the composite index of rainfall and irrigation for the year 1964-65, we have used the following procedure of calculation : we first expressed the percentage of area irrigated of all states in index numbers with that for the state with the highest value (Punjab) as 100; then we take the percentage of net sown area under heavy rainfall (defined as amounting to more than 46 inches) for all states, with the value for Assam, Kerala, Orissa and West Bengal reaching 100 and that for Andhra Pradesh and Rajasthan being zero; we now take a simple average of these two indices, one for the percentage of area under irrigation and the other for area under heavy rainfall.

be smaller in areas with higher interest rates on credit. If the parametric variation is in  $\alpha$ , the objective probability of getting wage employment for the tenant in the lean season — we

can show that  $\frac{dA_t}{d\alpha}$  is negative. This gives our proposition (E): *The larger is the extent of unemployment facing the landless households, the higher is the extent of tenancy.*

If we introduce production uncertainty (say, due to vagaries of weather) in the special multiplicative form on the production functions and consider the impact of a parametric variation in the riskiness of output on the extent of tenancy, we do not in general get any clear-cut result. In a very special case, when we assume that the landlord is risk-neutral but the landless tenant is risk-averse, we can easily prove our proposition (F): *An increase in production uncertainty reduces the percentage of area under tenancy.*

In Table 1 we have put together some inter-state cross-section data for India in the early 1950s which we are going to use in testing some of the propositions above. In the Table X<sub>9</sub> refers to the percentage of cultivated area under tenancy in 19 states in 1953-54. X<sub>6</sub> refers to the percentage of cropped area irrigated; X<sub>2</sub> to the percentage of area under rice, *ragi*, barley and jute (the most labour-intensive<sup>5</sup> crops in the Indian cropping pattern) to the total cropped area; X<sub>4</sub> to amount borrowed by small cultivators for household expenses to their total borrowing; X<sub>7</sub> to the proportion of total leased-in area in which the tenant, under the existing contract, could be evicted at will by the landlord and X<sub>8</sub> to the total number of unemployed days (for males) in agricultural labour households.

X<sub>6</sub> may serve as a very crude proxy for regional differences in land improvement due to differences in irrigation. One is assuming here that in efficiency

units a piece of irrigated land may be regarded as a multiple of a piece of unirrigated land of the same acreage (ignoring, for lack of data, that the same value of X<sub>6</sub> may have different land improvement effects depending on the effectiveness of the particular types of irrigation). According to our proposition (A) above, we should expect a *positive* relationship between X<sub>9</sub> and X<sub>6</sub>. To the extent irrigation protects against droughts and reduces production uncertainty, our proposition (F) also suggests a *positive* relationship between X<sub>9</sub> and X<sub>6</sub>. According to our propositions (C) and (E), we should again expect a *positive* relationship between X<sub>9</sub> and X<sub>2</sub>, and between X<sub>9</sub> and X<sub>5</sub>.

For testing proposition (D) we need interest rates, reliable data on which are extremely scarce (particularly because interest rates are effectively charged in so many different ways in the inextricably inter-linked transactions between the moneylender-landlord-employer-trader and the borrower-tenant-employer-seller). We have, instead, relied on a very indirect proxy, X<sub>4</sub>, which indicates the extent of dependence of small cultivators on borrowing for household consumption. The presumption is that the larger is this dependence, the lower is their elasticity of demand for credit and the higher is the effective interest rate that the moneylender will charge them. If this is the case we should expect a *negative* relationship between X<sub>9</sub> and X<sub>4</sub>.

X<sub>7</sub> is one index of the monopoly power of the landlord over the tenant in the form of the threat of tenurial insecurity. In our model there is no parameter which may reflect this index (it is built into the model in the sense that the landlord alone decides about how much land to allocate to the sharecropper at the conventionally given 50:50 crop share and the latter passively accepts it). If the landlord exerts this monopoly power to make the tenant also enter into some labour-tying arrangement (to ensure a smooth supply of labour on the landlord farm in the peak season), this may have a wage-depressing effect leading to a decline in the extent of land leased out. In that case we should expect a *negative* relationship between X<sub>9</sub> and X<sub>7</sub>.

On the basis of the data in Table 1 we have the following least-squares estimate for a linear equation:



$$X_4 = 14.681 + 0.434X_1 + 0.179X_2 \\ (10.631) \quad (0.161) \quad (0.076) \\ -0.165X_3 - 0.268X_4 + 0.133X_5 \\ (0.154) \quad (0.118) \quad (0.047) \\ R^2 = 0.775 \text{ and } F = 6.875$$

The co-efficients of all the independent variables (except  $X_4$ ) are significant at less than 5 per cent level and have the expected signs.<sup>6</sup>  $X_4$  has the expected negative sign, but is not statistically significant. The F-value for the equation is significant at less than 1 per cent level.

### III

#### On Forms of Tenancy

In the preceding Section we have assumed crop-sharing to be the only form of tenancy. But there are regions in India (particularly in the southern states) where fixed-rent (cash or kind) tenancy is predominant and in some regions both forms of tenancy co-exist. In this Section we shall try to explain regional variations in the incidence of share-cropping relative to that of fixed-rent tenancy in terms of some of the relevant economic factors.

Let us start with a brief description of the simple theoretical framework which will serve as a background for our empirical investigation in this Section. Suppose there are two types of tenants in our model: one is a landless share-cropper and the other is a landed farmer who enhances the size of his farm by leasing in land under a fixed rental contract.<sup>7</sup> The landless share-cropper takes whatever amount of land he gets at the conventionally fixed (usually 50:50) rental share of output; the landlord who enjoys some monopoly power *vis-a-vis* the share-cropper decides how much land to lease out to share-cropping and the latter does not participate in this decision. The landed tenant, on the other hand, has more bargaining power and decides about how much land he would like to lease in. In the labour market, the landed tenant hires labour, whereas the landless share-cropper family is a net supplier of wage labour.

As in Section II there are two seasons in the crop cycle. In the "lean" season 1 the market wage rate does not clear the labour market and there is persistent unemployment afflicting the landless share-cropper family. In season 2, which is a "peak" season,

there is full employment of labour at the going wage rate. The landless share-cropper, unlike the landed tenant, is dependent on the landlord for credit to finance his subsistence consumption in the lean season and he pays back the loan along with interest at the end of the harvest. The credit market is imperfect and the interest rate that faces the landless share-cropper is significantly larger than that for the landed tenant (or the landlord) when they try to get credit from outside source.

The landlord has been assumed to be non-cultivating and the equilibrium in the land lease market is reached when the landlord's supply of land under fixed-rent lease equals the landed tenant's demand for it. The wage rates in both seasons have been assumed, for simplification, to be determined outside the model.

In terms of this model we have been able to derive the following comparative-static propositions.<sup>8</sup>

- (A) The percentage of tenanted area under share-cropping will be *higher* in the case of more labour-intensive crops.
- (B) It will be *higher* in areas where the harvesting wage rate is higher.
- (C) It will be *higher* in areas with larger unemployment facing the landless families.
- (D) It will be *lower*, the larger is the extent of imperfection in the credit market (i.e., the higher is the differential interest rate that the landless share-cropper has to pay over that paid by the landed).
- (E) It will be *lower*, the larger is the extent of imperfection in the market for inputs like fertilisers.
- (F) It will be *lower* if there is smaller technical progress in the share-cropper's farm than in the fixed-rent tenant's farm due to, say, unequal access to irrigation facilities.
- (G) It is not clear in general if an increase in production uncertainty will increase or decrease the percentage of tenanted area under share-cropping. The latter will fall if the landed tenant is risk-neutral but the share-cropper

is risk-averse; it will rise with larger production uncertainty if both types of tenants are risk-averse, the landlord is risk-neutral and the share-cropper's production function is separable.

- (H) The wealthier is the fixed-rent tenant, the *smaller* is share-cropping.

In Tables 1 and 2 we have put together some inter-state cross-section data for India in early 1950s and in early 1960s, which we are going to use in testing some of the propositions above. In Table 1, relating to early 1950s,  $X_1$  refers to the area under share-cropping as a percentage of total area under share-cropping and fixed-rent tenancy;  $X_2$  refers to the percentage of area under rice, *ragi*, barley and jute (the most labour-intensive crops in the Indian cropping pattern) to the total cropped area;  $X_3$  to the harvesting wage rate for males in agricultural labour households;  $X_4$  to the amount borrowed by small cultivators for household expenses as percentage of their total borrowing;  $X_5$  to the number of days unemployed for males in agricultural labour households;  $X_6$  to the percentage of gross sown area irrigated;  $X_7$  to the proportion of total leased-in area in which the tenant, under the existing contract, could be evicted at will by the landlord; and  $X_8$  to percentage of the total tenanted area leased out by non-cultivating land-owners.

Proposition (A) suggests that we should expect a *positive* relationship between  $X_1$  and  $X_2$ , proposition (B) a *positive* relationship between  $X_1$  and  $X_3$  and proposition (C) a *positive* relationship between  $X_1$  and  $X_5$ . For testing proposition (D) we need interest rates, reliable data on which, as we have noted before, are extremely scarce. To measure the extent of imperfection in the credit market facing the landless share-cropper we had to rely, as before, on a very indirect proxy,  $X_4$ , which indicates the extent of dependence of small cultivators on borrowing for household consumption. The presumption is that the larger is this dependence, the lower is the bargaining power of the borrower and the higher is the differential interest rate he will have to pay. If this is the case, proposition (D) suggests that we should expect a *negative* relation-



ship between  $X_1$  and  $X_4$ . To the extent irrigation protects against droughts, we may assume that the larger is  $X_6$ , the lower is production uncertainty; but proposition (G) does not give us any clear-cut relationship between production uncertainty and  $X_1$ , except in some special cases. We can note, however, that if the landlord is risk-neutral but the tenants risk-averse and if the share-cropper's production function is separable, we should expect a *negative* relation between  $X_1$  and  $X_6$ .

$X_7$  is an index of the insecurity of tenure and hence of the power that the landlord has over the poor tenant. In terms of our model with two extreme types of tenants (one an insecure landless share-cropper over which the landlord exerts his monopoly power in deciding about land allocation and the other a landed fixed-rent tenant with more bargaining power), we should obviously expect a *positive* association between  $X_1$  and  $X_7$ .

What kind of a relationship should one expect between  $X_1$  and the relative importance of non-cultivating landowners in the land-lease market,  $X_8$ ? This cannot be answered in terms of our model where, for simplification, we have assumed *all* landlords as non-cultivating. If non-cultivating landlords are preoccupied with other professions (or are in special disadvantageous positions as in the case of widows, minors, the disabled, etc), supervision may be particularly costly. On the share-cropper's farm supervision is clearly necessary for the landlord at least at the time of harvesting to prevent under-reporting of the harvest. This kind of supervision may not be necessary on the fixed-rent tenant farm. So this may indicate that non-cultivating landlords would prefer fixed-rent tenants. But there are two important qualifications to this: one is that even in the case of fixed-rent tenants the landlord has to watch that the tenants do not mine the land or do any long-term damage to the soil properties; the other is that the landed fixed-rent tenant with a larger bargaining power may be a more "troublesome" tenant to the non-cultivating landlord than a landless share-cropper. The non-cultivating, often absentee, landlord is particularly afraid of losing his rights on the land; he may, therefore, prefer a landless share-cropper whom he may dominate much more easily. If this last point is important, as we think it is, we should expect a *positive* association between  $X_1$  and  $X_8$ .

On the basis of the data in Table 1 relating to the early 1950s we have the following least-squares estimate for a linear equation:

$$X_1 = 13.861 + 0.468 X_2 + 1.953 X_3 \\ (25.299) \quad (0.183) \quad (0.612) \\ - 1.284 X_4 + 0.136 X_5 \\ (0.426) \quad (0.117) \\ - 1.361 X_6 + 0.903 X_7 + 0.587 X_8 \\ (0.574) \quad (0.312) \quad (0.248)$$

$$R^2 = 0.792 \text{ and } F = 4.358$$

The co-efficients of all the independent variables (except  $X_5$ ) are significant at 5 per cent level.  $X_2$ ,  $X_3$ ,  $X_4$ ,  $X_7$  and  $X_8$  have expected signs. As for  $X_6$ , we have noted that for a special case (when the landlord is risk-neutral but the tenants are risk-averse and the share-cropper's production function is separable) we can explain the estimated negative sign of the co-efficient in terms of our model.  $X_5$  has the expected positive sign, but is not statistically significant. The F-value for the equation is significant at less than 3 per cent level.

Now let us turn to Table 2 relating to inter-state data in India in early 1960s.  $X_1$ ,  $X_2$  and  $X_3$  have the same interpretation as before, except that they now refer to a different year. As before, we expect a positive relationship between  $X_1$  and  $X_2$  and between  $X_1$  and  $X_3$ .  $X_{11}$  refers to the percentage of all cash loans borrowed by rural households from landlords and agriculturist money-lenders. This is a very crude proxy for the relative importance of the landlord-tenant creditor-debtor relationship. We expect a positive association between this and the relative importance of share-cropping, especially because recovery of loans is particularly easy for the crop-sharing landlord-creditor.  $X_{10}$  is an index of production uncertainty: as the standard error of the linear rate of growth of agricultural productivity per acre from a twelve-year time series, it is a measure of the fluctuations of productivity around the trend line for each state.

On the basis of the data in Table 2 we have the following least-squares estimate for a linear equation:

$$X_1 = -49.893 + 0.523 X_2 + 22.079 X_3 \\ (24.675) \quad (0.164) \quad (9.465) \\ + 0.542 X_{11} + 55.874 X_{10} \\ (0.243) \quad (17.776)$$

$$R^2 = 0.73 \text{ and } F = 6.092$$

The co-efficients of all the independent variables are significant at 5 per cent level.  $X_2$ ,  $X_3$  and  $X_{11}$  have expected signs.<sup>9</sup> As for  $X_{10}$ , we have already noted that for one special case we ex-

pect in terms of our model a positive association between production uncertainty and share-cropping. The F-value for the equation is significant at 1 per cent level.

### (To be concluded)

### Notes

- 1 The most important contribution in this direction in the Indian context has so far been that of Raj (1970).
- 2 See, for example, the studies of Bharadwaj and Das (1975) in Orissa and of Rudra (1975) in West Bengal. Ashok Rudra and myself have started on a detailed survey of contractual relationships in land, labour and credit markets to be conducted in about 400 villages in West Bengal, Bihar, UP and Punjab.
- 3 In the traditional agriculture of densely populated peasant economies, most important forms of technical progress tend to increase the effective supply of land. At any rate, the Indian data that we have used in our empirical analysis in this Section relate to a period when use of labour-saving

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machinery in agriculture was insignificant. Even in recent years the chemical-biological breakthrough in production with the use of high-yielding variety of seeds, chemical fertilisers, pesticides, etc — the so-called green revolution — has been largely land-augmenting in nature. We shall, however, have occasion to comment on the impact of introducing labour-saving changes in this model later.

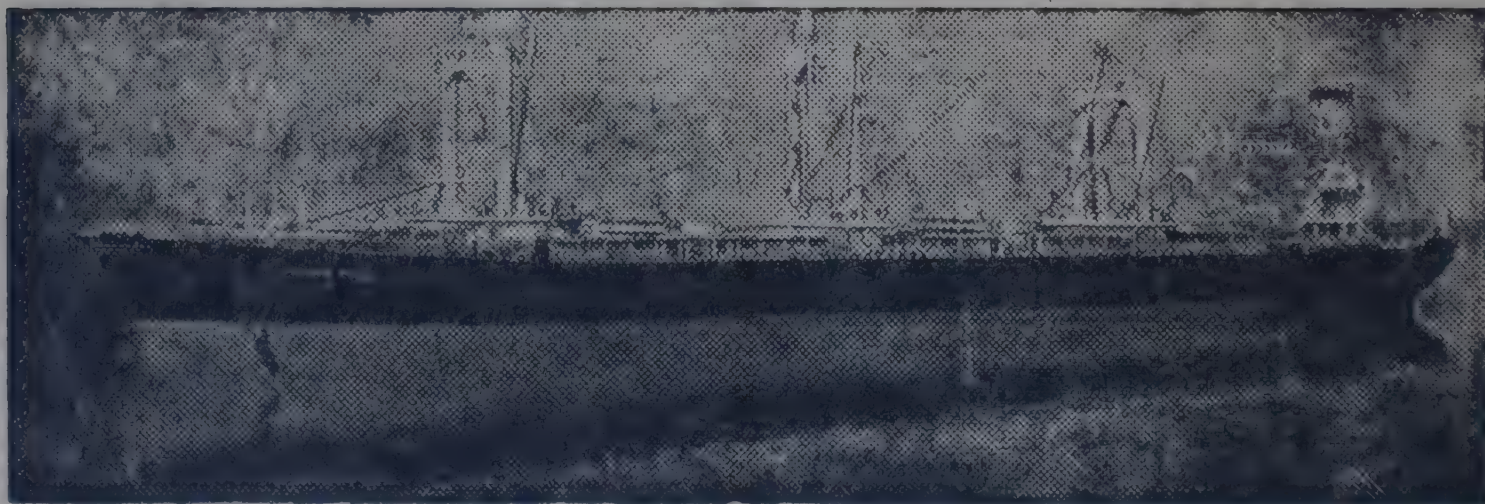
- 4 For proof of these propositions, see Bardhan (1976a).
- 5 The National Sample Survey Report No 170 gives data on human labour days utilised per acre for a number of crops. Except for sugarcane (which being a "perennial" crop is on a different footing altogether), rice, *ragi*, barley and jute are by far the most labour-intensive crops; human labour days used per acre on these crops are substantially larger than (sometimes more than twice) those for other crops like wheat, cotton, jowar, bajra, pulses and oilseeds.
- 6 The positive relation between the land improvement factor and tenancy can be confirmed in other contexts as well. We have checked from the National Sample Survey inter-state Land Holdings data for 1960-61 that the corre-

lation between the percentage of area under tenancy and that under irrigation is 0.638 (for 1970-71 data it is 0.663). Sharma (1968) has found in the 1961 Census data for 301 districts in India that the correlation between the percentage of area cultivated by landless tenants to total area and the average annual rainfall in the district (for 1959-62) is significant at 1 per cent level.

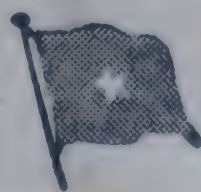
- 7 The presumption is that the risk-bearing capacity of the landless share-cropper is too low to enable him to operate in the fixed rental market where the full brunt of production uncertainty is on the tenant. Our classification of the two types of tenants is clearly an extreme one, intended only as a simplification for sharpening our results. In the real world various types of tenancy and asset characteristics inter-mix: there are many cases of landless fixed-rent tenants (particularly where production uncertainty is relatively low as, for example, in Kerala) and of landed share-croppers (as in Punjab). More on the size distribution of tenants in Section IV.
- 8 For proof see Bardhan (1976b). In proving these propositions we have assumed that the labour

elasticity of output in the lean season is small enough [for proving propositions (A) and (B)] the production functions are Cobb-Douglas [except for proposition (C)] that risky-investment is not an "inferior" good and that relative risk-aversion is non-decreasing in income.

- 9 One may note that both of our regression equations in this Section suggest a significant *positive* partial relation between the relative importance of share-cropping and some measure of production uncertainty. This is consistent with the observations of Cheung (1969) for pre-Communist China and Huang (1973) for Malayan paddy economy. Rao (1971) finds a higher incidence of share-cropping in the rice zone than in the tobacco zone in West Godavari (Andhra Pradesh) and tries to explain it in terms of entrepreneurial decision-making factors in the face of a higher degree of uncertainty in the cultivation of tobacco; in terms of our model in this paper the difference may *partly* be explained by the higher labour-intensity of rice compared to tobacco. Raj (1970) has also suggested an association between the incidence of share-cropping in Indian agriculture and labour-intensive rice cultivation.



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# Inter-State Tax Effort

## A Comment

G Thimmaiah

IN a recent article<sup>1</sup> K N Reddy has used some indices of tax efforts to highlight the relative tax efforts of the different states. The purpose of this note is to point out certain methodological mis-interpretations and to indicate an alternative approach which is better suited for the purpose. This note will also attempt to show the reasons for the failure of the Finance Commissions to take into account the relative tax efforts of the states while determining the grants-in-aid to the states.

Reddy has used 'Frank-Bird' indices and multivariate regression analysis to estimate the relative tax efforts of the states. Besides, he has also compared the elasticity of the states' tax revenue and marginal tax ratios. He has rightly concluded that 'Frank-Bird' indices are very crude indicators of relative tax efforts of the states as they ultimately boil down to the ratio of states' tax revenue to states' income. For the same reason he has maintained that income-elasticity of tax revenue is an inadequate index of relative tax efforts of the states. Therefore, he has used the methodology adopted by Charles Montrie, Kenneth J Fedor and Harlan Davis.<sup>2</sup> These three authors have used what is now known as the 'Aggregate Regression Approach' to measure the relative tax performance of the Latin American countries which are members of the Alliance for Progress. They have used both univariate and bivariate regression analysis and the elasticity of tax revenue and marginal tax ratios to find out the relative self-reliance of these countries. They have regressed the ratio of total taxation of the Central government to the GNP on per capita income and also on the ratio of foreign trade to GNP, the ratio of total revenue of the Central government on per capita income and on the ratio of foreign trade to GNP, and the total revenue of all levels of government on per capita income. They have compared these results with the *ex post* elasticity (buoyancy) of the tax revenue and the marginal tax ratios.

The aggregate regression approach was first developed by IMF experts<sup>3</sup> and therefore cannot be attributed to Charles Montrie *et al.* In fact these authors have not claimed their method as their own. Surprisingly, Reddy calls their method as their 'model' which is not true. Further, he

has implied that 'their and Akin's methodologies are the same which is again not true. Whereas the earlier three authors' methodology is the aggregate regression approach, Akin has used multiple regression analysis as a tool in preference to a direct method of measuring the relative tax efforts of the states in the USA, under the Representative Tax System Approach. The relevant difference between these two approaches have been brought out by Roy W Bhal in his 1972 article.<sup>4</sup> Thus Reddy's interpretation of the methodologies used by Charles Montrie *et al* and John S Akin is wrong.

### I

The early attempts to measure the elasticity of tax revenue by using regression analysis were the precursors of the aggregate regression approach to relative tax efforts.<sup>5</sup> From this some economists<sup>6</sup> developed regression models for quantifying the determinants of government revenue. Then the IMF experts and others used the same regression analysis to estimate the relative tax efforts of different countries.

Under the aggregate regression approach the total revenue of a state/country was regressed on the total income or per capita income and the resulting co-efficient was considered as the effective tax rate. This rate was applied to income to get the potential revenue. This was called the 'Income Approach'. This univariate method was used in the USA for measuring the relative taxable capacity of the states though in the case of the local governments the taxable property was used as the sole determinant of their relative taxable capacity. However, it is realised that though all taxes are paid out of income, all of them are not levied directly on income. Therefore, the income approach by confining itself to income as the main tax base cannot explain to what extent governments have cultivated and exploited various tax bases as specified in the Constitution or relevant legislation. Besides, the income approach cannot capture the taxable capacity arising from 'tax-exporting' or taxation of non-residents. Therefore, the income approach is now broadened to include various other relevant variables which determine the relative taxable capacity such as per capita income, ratio of exports and imports to GNP, degree of urbanisa-

tion, ratio of agricultural income to GNP, etc. However, this comprehensive multivariate aggregate regression method gives only hypothetical taxable capacity and cannot give a clear idea about the true taxable capacity. This is because it uses only proxies of the true tax base as determinants of taxable capacity.

During the post-war period, the science of public finance developed rapidly in the American continent. This development had its influence on the concept of taxable capacity also. In America, the concept of taxable capacity as expounded by the European economists remained only in text-books. The policy-makers did not pay much attention to this, apparently because of its limited applicability to policy formulation. It was only during the 1930s that some attempts were made to develop more pragmatic approaches for the purpose of providing quantitative guidelines for policy-makers particularly at local and state government levels in America. Perhaps the early attempts in this direction were made in the Teachers College, Columbia University, New York. It has been reported that as early as 1923 Strayer and Haig<sup>7</sup> suggested a formula for measuring the relative taxable capacity or the tax potential of the school districts for the purpose of guiding the federal government in making foundation grants for school districts. The formula suggested by them was:

$$A_i = N_i u - r Y_i$$

where  $A_i$  is the amount of grant to the *i*th school district,  $N_i$  is the number of students in attendance in the *i*th school district, '*u*' is the foundation expenditure per student,  $Y_i$  is the tax base of the *i*th school district (i.e., the equalised value of taxable property) and '*r*' is the average effective tax rate. The tax rate was set constant for all districts in such a way that '*A*' equalled zero in a representative rich school district. This methodology was further improved by Swift in 1931.<sup>8</sup> But it was Mabel Newcomer<sup>9</sup> who developed what is now known as the 'Representative Tax System Approach' in 1935. Thus the American scholars have coined the concept of 'revenue potential' for the purpose of guiding policy decisions. However it should be emphasised here that the concept of revenue potential means the same as the concept of relative taxable capacity as both of them refer to the maximum tax paying capacity of a country, state or a sector as the case may be.

Two methods have been used to estimate the revenue potential through the representative tax system ap-



proach: (i) direct method and (ii) regression method. The direct method was used by Strayer and Haig, Swift, Cornell and Newcomer to measure mainly the relative tax efforts of the local school districts and also the states. In 1962, the American Advisory Commission on Intergovernmental Relations<sup>10</sup> (ACIR) used the direct method to estimate the revenue potential of all the states in the American federation. This method has also been used again in 1971 by ACIR<sup>11</sup> to estimate the revenue potential of all the states. The same method has been used by scholars like James H Lynn<sup>12</sup> in Canada to estimate the revenue potential of the provinces in the Canadian federation. But in Australia, a slightly different method has been used from 1933<sup>13</sup> to measure the revenue efforts of the claimant states which applied for special grants.

The direct method of the representative tax system approach used by the ACIR first of all estimates the tax base of each tax of individual state governments. Then the actual revenue from that tax is divided by the estimated tax base of that source of revenue to obtain what is known as the effective average tax rate. This is the effective rate which should be applicable to the base of the relevant tax in all the states in a federation. In other words, it is a representative rate at which the relevant tax base prevailing or located in each state should be taxed. This rate is applied to the estimated tax base of each state and the potential revenue from that tax is estimated. It is the potential revenue from that source of revenue in a particular state. Thus, the ACIR formula can be written in the following way:

$$RP = \left( \frac{\sum r_i}{\sum b_i} \right) \times (b_i) + \dots + \left( \frac{\sum r_n}{\sum b_n} \right) \times (b_n),$$

where RP = revenue potential of a state

$r_i$  = the actual revenue raised by a State from  $i$ th source of revenue

$b_i$  = the estimated/actual base of  $i$ th source of revenue of a state.

The actual revenue raised as a proportion of this potential revenue is known as the revenue or the tax effort as the case may be. In this direct method, the difference between the potential and actual efforts arise due to variations in tax rates as well as tax base. For the purpose of finding out the overall relative tax efforts of the

states, what is done under the representative tax system approach is that after estimating the revenue potential of each state from each source of revenue, they are aggregated to indicate the aggregate revenue potential of the revenue system of the state. The proportion of the actual yield from all taxes to the aggregate potential revenue is interpreted as the total tax effort of the state. Thus for estimating the overall revenue/tax efforts under the representative tax system, we cannot aggregate the revenue/tax bases of the entire revenue system at a time. Because we have no objective way of summing up different revenue bases, the above mentioned horizontal aggregation is used.

In recent years, economists have advocated that multiple regression analysis should be used to estimate the revenue/tax bases and also effective rates under the representative tax system approach. It is maintained that multiple regression analysis will take into account all those factors which influence the yield from a particular source of revenue or the entire revenue system as the case may be. Under the regression method, in addition to the relevant revenue/tax base of a particular tax or source of revenue, certain other important economic variables which determine the yield from that revenue/tax such as per capita income, degree of urbanisation, etc, are used and their relative impact on the actual revenue raised is estimated. The regression co-efficients so obtained are converted into standardised beta co-efficients and are treated as marginal effective rates. These rates are applied to the relative revenue/tax base and to other independent variables used in the regression analysis and, accordingly, potential revenue from a particular source or from the entire revenue system as the case may be is estimated. This method takes into account the influence of not only the relevant tax or revenue base but also other possible economic factors which might influence the yield from that source directly or indirectly. The revenue/tax potential so estimated by using multiple regression method therefore is weighted by the relevant revenue/tax base and other important variables used therein. As the regression method yields marginal effective tax rates and takes into account the influence of other important determinants of revenue/tax potential, there will be a difference between the revenue potential and efforts as estimated by direct method and as estimated by using regression method under the representative tax

system approach. This is because the direct method yields simply the average revenue/tax potential whereas the regression method yields the weighted revenue/tax potential. Though the regression method helps in identifying the influence of other relevant economic factors on the revenue yield in addition to the relevant tax base, whether it is appropriate to take into account the influence of other factors while estimating the revenue/tax potential is a moot question.

It may be mentioned here that the regression method was first used to estimate the tax efforts of 49 developing countries through the representative tax system approach by Roy B Bhal in 1972.<sup>14</sup> Recently, it has been used by John S Akin<sup>15</sup> to estimate the tax potential and efforts of the states in the American federation. The regression method yields marginal effective tax rate which he considers more relevant for estimating the revenue potential of the states. On this ground he has maintained that the ACIR direct method which uses average effective rate is methodologically inferior. Akin has used multiple regression analysis to estimate the relative tax effort of the states under the representative tax system approach and to show how the results differ from those obtained through the ACIR direct method. This is the main theme of his paper. But Reddy has observed that Akin's method is the same as that of Charles Montrie *et al* and Raja J Chelliah *et al*, which is not true.

Thus, it will be clear from the above review that the aggregate regression method which Reddy has used is different from the regression analysis used to estimate the relative tax efforts through the representative tax system approach. Though Charles Montrie *et al* and Raja J Chelliah *et al* have used the aggregate regression approach to estimate the relative tax efforts of several countries, Akin has used regression analysis to estimate the relative tax efforts through representative tax system approach. This distinction is unfortunately not noticed by Reddy and hence he has mistakenly recommended that multiple regression analysis *per se* is better than other methods of estimating the relative tax efforts of the states in India. In India though several attempts have been made to measure the relative tax efforts of the states, none has used the representative tax system approach.<sup>16</sup>

What Reddy has used is the regression analysis under the aggregate regression approach for measuring the



relative taxable capacity of the states. This method does not tell us how far the state governments have cultivated and exploited different revenue sources assigned to them. Therefore, it may not be useful in guiding the state governments in their policies relating to raising the revenue efforts through appropriately taxing their different sources of revenue.

Since the results from the direct method and the regression method under the representative tax system approach differ for the earlier mentioned reason, it would be very difficult to arrive at any definite conclusions regarding the relative revenue/tax potential and revenue/tax efforts of the states. At the most one may follow the approach adopted by Montrie, Fedor and Davis namely, that the direction of movement of all the results obtained through various methods should indicate broadly the relative taxable capacity and tax efforts of the states. It is in this context that, in the ultimate analysis, the representative tax system approach becomes the traditional relative taxable capacity approach.

The concept of relative taxable capacity can be considered as an ordinal concept, because we can only indicate whether the relative taxable capacity of a nation or a sector or of different states in a federation has increased or not over time. For this purpose, we must know the determinants of relative taxable capacity such as the levels and rates of growth of national/sectoral/state incomes, levels, rates and growth and distribution of government expenditure, etc. These are some of the important economic determinants; leaving aside a host of non-economic variables such as wars, 'displacement effect', etc, on which the relative taxable capacity is supposed to depend. On the basis of the direction of movement of these determinants of relative taxable capacity over time, we can infer whether the relative taxable capacity has increased or not. Until the period of the Great Depression, economists used to find out the changes in the determinants of relative taxable capacity and conclude whether the relative taxable capacity of a country/state/sector has increased or decreased in an ordinal sense. But with the advent of econometrics, attempts were made to use regression analysis to quantify the extent of the increase in the relative taxable capacity. It was out of these attempts that the aggregate regression approach of measuring the relative revenue/tax efforts has emerged.

## II

Reddy has pointed out how the Finance Commission did not take into account the relative tax efforts of the states in India while recommending the financial transfers from the Union Government to the states. But he has not highlighted the reasons for the Commission's failure in this regard. It is not difficult to understand the reasons for the failure of the Finance Commissions to take into account the relative tax efforts of the states as an important criterion. Though all the Finance Commissions have mentioned that this should be taken into consideration while recommending financial assistance from the Union Government to the state governments, they have not in fact taken it into account in their actual recommendations. This is because their out-moded methodology of determining the financial transfers to the states for covering their non-plan revenue gaps does not require them to take into account the relative revenue efforts of the states. However the main reasons advanced by the Finance Commissions for their failure in this regard are: (1) short period of time at their disposal, and (2) lack of the required data and even expertise. One can understand the first reason in view of the increasing number of terms of reference of the successive Finance Commissions. But the second reason cannot be justified particularly in the context of the states' preparedness to supply such data and information required for its deliberations and also in view of the fact that many economists<sup>17</sup> served on the successive Finance Commissions. Perhaps the failure on the part of the Finance Commissions can be attributed to: (1) their failure to develop a methodology of inter-governmental financial transfers<sup>18</sup> which would take into account relative tax efforts as one of the criteria for determining the extent of financial transfers to the states, and (2) the failure on the part of the experts, particularly the economists, to suggest a suitable method of measuring the relative tax efforts of the states within the short period of time at the disposal of the Finance Commissions. This is evident from several studies relating to the Finance Commission.<sup>19</sup>

The First Finance Commission proclaimed that the relative revenue efforts of the states should be one of the criteria for determining the financial assistance particularly the grants-in-aid of the states. But the Commission did not specify how it really took this into consideration while recommending financial transfers from the

Union to the states. This only gave the impression that it did not really take it into account at all. The Second Finance Commission recognised the need to take the relative revenue efforts of the states into account. But owing to the short period of time at its disposal, it could not estimate the revenue potential and efforts of the states. Instead, it compared the actual additional revenue raised by the states with the additional resource mobilisation promised by them for the First Plan for getting Central assistance. It was no doubt a pedestrian approach but still a step in the right direction. Even so the Second Finance Commission did not really integrate this method into its methodology of determining the grants-in-aid of the states. The Third Finance Commission simply accepted its inability to face the problem and observed that it was not in a position to estimate the relative revenue efforts of the states for want of time and required data. The Commission maintained that any such estimate in order to be objective and reliable should be done by an independent agency. The Fourth Finance Commission evaded the issue by observing that the additional revenue raised by the state governments was meant for Plan expenditure and therefore did not fall within the purview of its terms of reference. The Fifth Finance Commission no doubt made an attempt to compare the relative revenue potential and efforts of the states by comparing per capita income, per capita tax, tax revenue as proportion of state income and the prevailing tax rates in different states. But it did not really penalise those states which did not tap their resources to the hilt nor did it give any bonus to those which had tapped them.

The Sixth Finance Commission tried to overlook the problem by observing that "... application of formula based on relative tax efforts, however designed, would place at a disadvantage some of the states faced with big gaps on non-Plan revenue accounts. To leave such gaps uncovered on the ground of their poor tax performance, however defensible on theoretical considerations, would jeopardise maintenance of essential administrative and social services for want of adequate resources".<sup>20</sup> Therefore, the Commission swept the case for estimating the relative revenue potential and efforts of states under the carpet of practical implications and tried to console the Union Government by drawing its attention to the 1969 Plan grants formula<sup>21</sup> which takes into account the relative tax efforts of the states. Thus.



all along the Finance Commissions which ought to have made an attempt to estimate the relative revenue potential and efforts of the states have failed to do so, for the two reasons mentioned earlier.

The Planning Commission which has been mainly concerned with the determination of Plan priorities, allocation of Plan expenditure and the formulation and evaluation of Plans, did not give much importance to this problem in the initial years. However, as more and more states started asking for larger financial assistance and bigger Plans, the Planning Commission was compelled to pay some attention to the relative revenue efforts of the states. But here again the states started promising higher levels of additional financial resources for getting the size of their Plans inflated by the Planning Commission, while pleading their inability before the Finance Commission to raise substantial revenues owing to their lower revenue potential *vis a-vis* the Union government and hence urged the Finance Commission to recommend larger grants. In case the recommendations of the Finance Commission were unfavourable, the states directly approached the Union government for additional financial assistance to keep their non-Plan revenue gaps at a minimum level, and pleaded before the Planning Commission for more Central assistance to keep the originally agreed size of the states' Plans intact for political reasons. Thus both ways the states got away with as much Central assistance as possible and as little additional revenue efforts as possible. The Planning Commission, after recognising this unhealthy trend, started estimating the revenue potential of each state on the basis of whatever data it could gather and suggested the targets for additional resources mobilisation by the states under the successive Plans. Even here all the states did not fulfil the targets of additional resources mobilisation. Consequently, the Planning Commission thought that it would be better to give an incentive in the form of a given proportion (10 per cent) of the Plan assistance to those states whose tax efforts were above the expected level. But it is not known as to how the Planning Commission has been estimating the revenue potential and revenue efforts of the states in order to decide whether or not a particular state is entitled for that part of the Central assistance. It is for this reason perhaps that the Planning Commission has been trying to improve its data and information with regard to the relative revenue potential and efforts of the

states. In pursuance of this objective, the Planning Commission has been sponsoring some studies on the revenue potential and efforts of the states.

Therefore Reddy's criticism that even the Planning Commission has not paid adequate attention to the relative tax efforts of the states while distributing the Central assistance is not justified. But what is really required is a reliable methodology which can be used to indicate the relative tax efforts of the states in relation to the relative revenue potential. Such a methodology should enable the Finance Commission and/or the Planning Commission to point out the differences in the relative tax efforts of the states in the particular fields in which they have not tapped their revenue potential to the hilt, and to indicate the differences arising from differences in rates, differences in the revenue bases arising from differences in exemption limits, and deficient administration resulting in evasion. For this purpose, it appears to me that the regression method under the representative tax system approach is more suitable in contrast to the aggregate regression approach which Reddy has used and favoured. Such a study covering the southern states has been completed by the present writer for the Planning Commission.

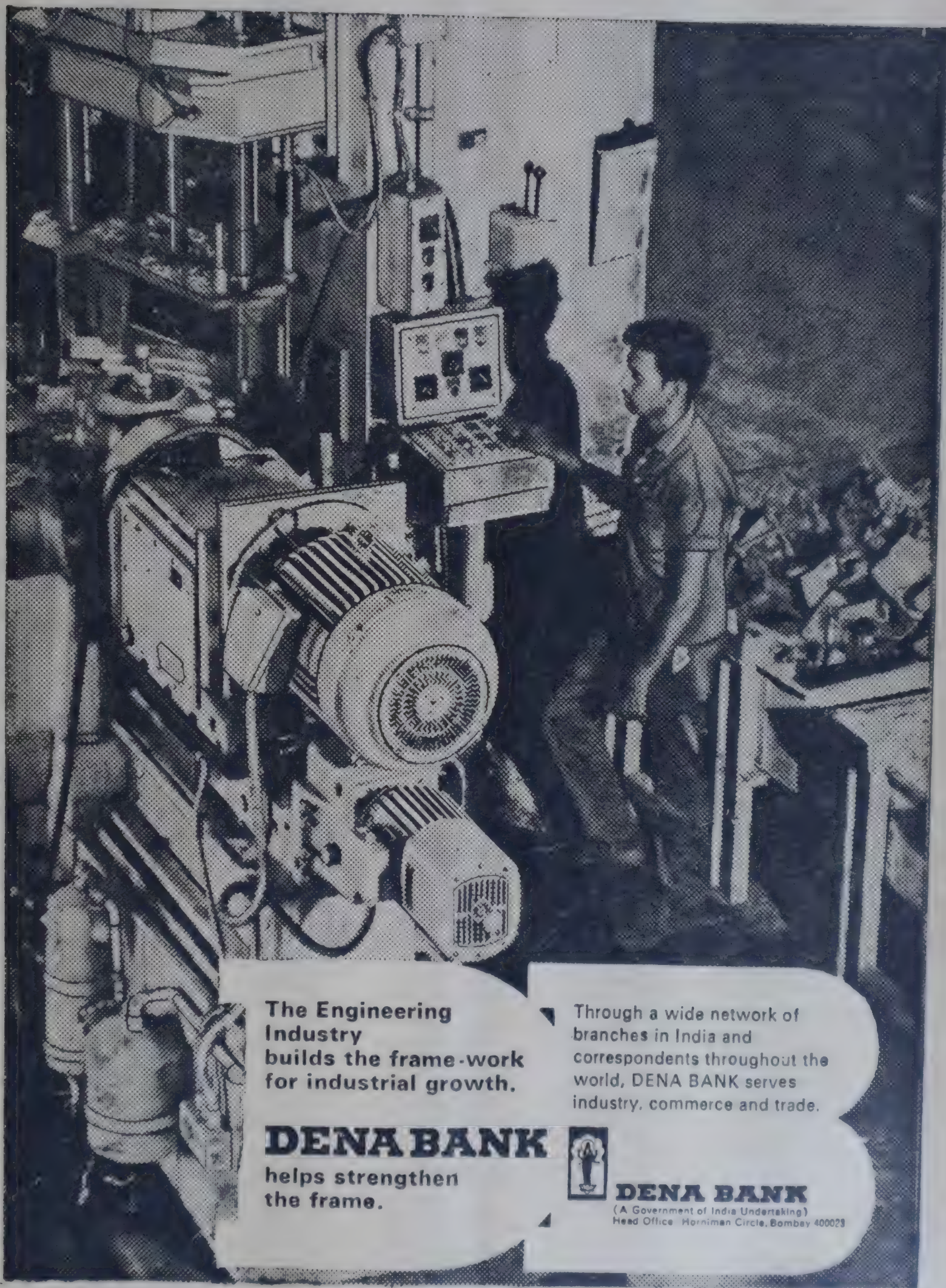
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# A One-Swallow Summer?

THE economy today is characterised by a number of contrary trends. The prospect of a second successive year of good agricultural production, the building up of a substantial stock of foodgrains, the apparently impressive rise in the index of overall industrial production, the dramatic improvement in the foreign exchange reserves position and, above all, the claim that inflation has been halted and reversed give the impression of a decisively favourable economic situation. These favourable developments have naturally received a great deal of publicity. Nevertheless, doubts persist that these are short-term surface developments which convey an over-optimistic picture of the basic economic situation and the prospects of longer-term growth. These doubts are supported by the evidence of low real levels of investment in high priority capital and consumption goods industries, growing unemployment, large-scale lay-offs and even incipient re-emergence of inflationary pressures.

It was expected, therefore, that in its Annual Report for 1975-76, just released, the Reserve Bank would make a systematic analysis of the economic situation and try to separate the chaff from the grain. Unfortunately, the Reserve Bank has not proved equal to the task. If it was the Reserve Bank's objective to present the economy in the rosier possible light, it could not have hoped to succeed better. Thus Samachar summed up the Reserve Bank's Annual Report with the statement that "the Indian economy never had it so good as in the year ended June 1976, and it is moving to higher levels of saving, investment and growth in an environment of price stability". By promoting such a view of the economic situation, the Reserve Bank—as the country's central bank with considerable economic skills and detailed knowledge of the state of the economy at its command—has done a disservice even to those who are charged with the management of the economy.

The Reserve Bank's Report opens with the claim that "the year 1975-76 would be characterised as a year in which it has been possible to put the economy back on its normal growth path". The use of the word 'normal'—which recurs at least half-a-dozen times in just the first two pages of Report—is perplexing since the economic performance of last year was, if anything very definitely 'abnormal', going by the standards we have been used to for a long time. The rate of growth of over 5.5 per cent can scarcely be described as 'normal', considering that it has been equalled or exceeded in all two or three times in the last 15 years.

Doubts about the 'normalness' of the growth achieved in 1975-76 become stronger once we consider its components, of which the growth of 8 per cent in agricultural production was the principal one. The Reserve Bank strains hard to play down the role of the monsoon in the rise in agricultural production in 1975-76. It argues that "although admittedly climatic factors continue to dominate the trend of agricultural growth—in 1975-76 weather conditions were quite favourable—there are indicators that the investment-induced growth component, as contra-distinguished from the fortuitous component, was quite significant in 1975-76". In support of this claim the Report points to the "substantial increase in agricultural inputs like fertilisers, power and water". However, while there was a rise of about 19 per cent in the consumption of nitrogenous fertilisers, much of it can be quite plausibly attributed to the good monsoon itself. In other years of good rains, even higher increases in the consumption of fertilisers have been recorded. Incidentally in 1975-76 there was a decline in the consumption of phosphatic and potassic fertilisers over the already low levels. The increase in gross area irrigated in 1975-76 (1.6 mn hectares), again, was smaller than that in 1972-73 (2.5 mn hectares) and 1973-74 (2.1 mn hectares), to take two recent years. In fact, the Reserve Bank itself does not seem to be convinced by its own argument that the 'investment-induced growth component' was dominant in the rise in agricultural production in 1975-76, for in the section of the Report entitled "Outlook for Growth 1976-77", we come across this statement: "One thing seems obvious that a growth rate of the agricultural sector of around 8 per cent in 1975-76 is attributable to uniformly favourable weather conditions"!

The discussion of the industrial situation in the Report similarly skims the surface. It is noted that while some of the 'core' industries like coal, electricity, steel, fertilisers, cement, and non-ferrous metals recorded growth of over 10 per cent in 1975, production in other industries like cotton textiles and yarn and some consumer durables had declined. However, two vital points are missed with regard to the seemingly large rise in the output of some of the 'core' industries. First, the recent spurt in the output of these industries has followed a long period of very low growth. Second, the growth of



production of these industries in the last few months has promptly given rise to a situation of lack of demand and mounting stocks, which is already forcing — as for instance in the case of coal — a slowing down of the rate of growth of output.

The Reserve Bank's Report pretends that the problem of lack of demand has affected mainly certain consumer goods industries. This reduces the problem to one which can be dealt with by short-term measures like reduction in excise duties. The problem of lack of demand and excess capacity is, however, more deeply rooted in the prolonged low levels of overall investment in the economy and the specific patterns of industrial investment and capacity creation which have been encouraged. In this context, the Report's discussion of recent changes in the government's licensing policies is jejune. Even other official publications like the Department of Industrial Development's "Guidelines for Industries" now admit that some of the recent changes in the government's industrial policies like exemption of a large number of industries from licensing, relaxation of licensing procedures, liberal grant of permission for expansion and diversification and legitimisation of illegally installed capacity have all resulted in the creation of capacity much in excess of demand in a wide range of metallurgical, engineering and other industries (see "Induced Sickness", August 28). By contrast, the Reserve Bank uncritically accepts these policy changes as being designed to ensure fuller utilisation of capacity and to promote investment in priority sectors.

The Reserve Bank has avoided discussion of the problem of lack of demand facing many of the 'core' industries perhaps because it does not fit in with its claim of a sharp rise in the rates of domestic saving and aggregate investment in 1975-76. According to 'preliminary estimates' based on 'fragmentary data', the rate of domestic saving is claimed to have gone up from 13.1 per cent in 1974-75 to 14.5 per cent in 1975-76 and the rate of investment from 14.8 per cent to 16 per cent. These, it is further claimed, are the highest rates of saving and investment achieved since the beginning of the Fourth Plan.

The growth in saving in 1975-76 is supposed to have taken place in the public sector and in the household sector. The main component of the growth is apparently the household sector's saving in the form of financial assets. How-

ever, estimating investment from the estimate of financial savings is likely to inflate the investment ratio in a year when the national income deflator declined by about 3 per cent without a corresponding decline in the cost of investment. In fact, the cost of investment may be estimated to have gone up by about 8 to 10 per cent in 1975-76. That the Reserve Bank's estimate of the investment ratio overstates the actual increase in investment in the economy in real terms is supported by the fact that the consumption of investment goods did not show any sharp rise during the year.

The Reserve Bank has not cared to probe into these issues. An example of its superficial approach is its mechanical repetition of the Planning Commission's claim about a 31.4 per cent rise in the Plan outlay in 1976-77. As has been pointed out in these columns, the Plan outlay for the current year is higher by 31.4 per cent not when compared to the actual outlay last year but to the original provision. This comparison with the original provision cannot give any indication of either the likely step-up in the tempo of developmental activity or the additional demand for goods and services likely to be generated as a result of the Plan expenditure. That the actual increase in Plan outlay in 1976-77 will be of a much smaller order is indicated by the total developmental outlays of the Central and state governments in 1976-77, which show a rise of just 3.8 per cent over the revised estimates for 1975-76 for the Centre and 7.7 per cent for the states.

One swallow does not make a summer. No more will one or two years of good agricultural production, a spurt in industrial production extending over a dozen months, or a one-time rise in the investment ratio, put the economy on the 'growth path'. That will require far-reaching institutional and structural changes making for widely dispersed growth of agricultural productivity, wrenching of the pattern of investment and production from its present moorings of the consumption requirements of a small segment of the population and, correspondingly, expansion of employment and creation of purchasing power among the masses of the people.

## **Flood Relief**

### **Power Relations in Action**

ASSAM is one of the states which is, with unfailing regularity, visited by 'unprecedented' floods and consequent mis-

ery for its people, year after year. So it is proper that the Comptroller and Auditor General of India, in his Supplementary Report for the year 1973-74 for Assam, has taken a close look at the whole business of relief and rehabilitation of the flood-affected people in three districts of Assam — Goalpara, Kamrup and Lakhimpur — during the period between April 1969 and March 1974.

The Report lays bare numerous instances of administrative and procedural irregularities and, what is even more interesting, throws light on the discrepancies and contradictions discovered in the actual disbursement of relief.

The 'usual' flood season in Assam is summer — the months between May and August. The principal official measures taken to relieve the distressed are (1) provision of gratuitous relief (GR) to the flood-affected people; and (2) execution of test relief works (TRW) to provide employment for short periods to those people. The long-term measures include repairs to roads, bridges and embankments, and damaged public buildings like village schools, etc. During the period under review (1969-70 to 1973-74), Rs 811 lakhs were spent on GR and TRW, and Rs 1,848 lakhs on long-term measures. Of the Rs 811 lakhs spent on GR and TRW, Rs 361 lakhs was spent on GR, Rs 447 lakhs on TRW, and Rs 2 lakhs on establishment expenses.

The Report reveals that though the GR and TRW are to be undertaken only when fresh cultivation is not possible due to floods, and the people affected are left without any work or wherewithal, the relief works invariably went on far beyond the stipulated limit of 60 days. In fact, as Appendix VIII to the Report shows, disbursement of GR was not limited to any particular period of distress in relation to the calamities, but was spread throughout the year. Does this perhaps mean that the floods were so devastating, and the affected people so severely battered that they in fact needed to be supported, in howsoever modest a manner, by the state for months on end? Such, however, does not seem to be the case. For, in more than one place, the Report notes that records available did not indicate

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that the persons selected for GR were really in need of it. "It appeared that the selection of persons and distribution of gratuitous relief, either in cash or in kind, were generally left to the gaon panchayats."

What about test relief works, and the employment of local labour for it? "Attendance of labourers was recorded in most cases by labour leaders, presidents or secretaries of the anchalik and gaon panchayats. Lump-sum payments were made to these persons and receipts obtained. In no case was attendance of labourers checked by any responsible government official." Was this the only practical way of channelling the sorely needed relief-funds to the affected villagers? The Report shows that this was not the case. Though only villagers actually affected by the floods were entitled to work on TRW schemes, most of the work in these districts was actually executed by 'contract labour'. "Instances were noticed where works were executed through contractors or leaders of *shramik bahinis* on commission basis or by engagement of labour from outside." The Report actually cites instances where imported Bihari labour was employed in work intended as relief for flood-affected people.

The Report also points out instances where there were irregularities in the wages paid. "The muster rolls and other records available for a test check did not indicate clearly the amount paid as wages." And as for the disbursement of GR, the following extract from the Report is eloquent in its subdued bureaucratic dissatisfaction:

"Only in a few instances were gratuitous relief, rehabilitation grants and seeds distributed by the staff of the blocks in the presence of members of panchayat, gramsevak or others, who identified the payees as contemplated in the executive instructions. In test check it was seen that payment or distribution was mostly made by members of the panchayats who did not record certificates that they had identified the payees. In a test check of accounts rendered for Alimur Chaparigaon and Alimur Baligaon villages of North Lakhimpur sub-division, it was noticed that the number of members of the same families and their signatures were different on the different occasions when gratuitous relief had been distributed.

In another case, rehabilitation grants were paid to 75 persons affected by floods in 1973 in Mandia Development Block at Rs 100 each on the basis of identification made by the vice-president of the gaon panchayat. A police case was registered as it was apprehended that some persons identified were fictitious and even

those who were actual recipients had to share their grant with the identifier and his party."

This is just one brief supplementary report reviewing expenditure on R and R of flood-affected people over a period of just five years in parts of three districts of one state. The Report itself is very 'correct' in its disapproval of bureaucratic irregularities. But in its own way, the Report also highlights some essential aspects of rural India, and the way power relations operate there. No work can be done in the villages independent of, much less opposed to, that power structure, be it the gaon and anchalik panchayats, or their counterparts at the town, district and the state levels. These are the channels through which even government aid has to be canalised; but how porous these channels could be, and often are, is tantalisingly touched upon in this Report of the Comptroller and Auditor General.

## Ahmedabad

### The Two Banks of the River

#### A Correspondent writes:

THE famous Sabarmati river is not much of a river. It is a dry sandy bed over which are scattered isolated pools of stagnant water. As the rains come, the pools gradually become fuller, and eventually overflow, spreading a sheet of water over the bed and forming a stream. A few short spells of heavy rain make the stream wider and deeper. And it is during these spells that the river flows full, occasionally swelling beyond the confines of its banks. The rainy season is, however, short and after it the river is again a sandy bed with stagnant pools.

Sabarmati divides the city of Ahmedabad into two greatly unequal parts. On the east are mills, factories and workshops. On this side live the workmen, the majority of them housed in chawls, busties and slums. On the west side live those who own the factories and those engaged in a variety of business and trades. On this side are also the majority of the educational institutions.

Life on the east is typically that of the workmen. And it is not an easy life. Deshpande is in his early twenties and has been working in a local pottery works for over three years. That he 'belongs' to the factory, however, one cannot be entirely cer-

tain. He has no attendance, leave or ESI card; his name does not appear in the muster roll. He works 10-12 hours a day and is paid a certain sum at the end of the month which he notes down in a small note-book which is initialled by the manager. There is no salary slip. He can be fired at will, can claim no statutory benefits, and cannot go to the ESI clinic in case of injury or sickness. In case of a grievance or dispute, he will have an uphill task making use of the labour courts. Once in a while Deshpande and others like him are suddenly asked to take a day's leave or a short unscheduled break from work and are asked to go out of the factory premises. This means that someone from the labour department has come to visit the factory. It also means that the inspector making the visit is new to the area, for the old ones generally manage to carry out their inspections without ever discovering the Deshpandes. According to the law, uninterrupted service of 240 days entitles a workman to be made permanent. In practice, it takes a workman several years before he becomes permanent. Deshpande, for instance, is yet to be made permanent.

Mohan Singh has worked in a cement factory for over five years. He has just returned from his home in UP after a two-week vacation which had been 'granted' to him before he had left for home. On return, he was called into the manager's office and told "you can no longer come to this factory for work". Shocked, Mohan asked "why?" "You had resigned before leaving; you can join the factory only as a fresh workman, if you like", he was informed and shown his 'resignation' letter — the same paper which the manager had asked him to sign before going on 'leave' on the pretext that it was the required leave application. The ploy was, of course, designed to effect the crucial break in service, disqualifying Mohan from various benefits like gratuity, lay-off compensation, etc, to become eligible for which a continuous service of five years is necessary. If a workman is lucky he fulfils this requirement in about a decade.

Ukabhai has been fighting his retrenchment case for two years. The factory where he had been working for seven years has the same system of 'leave'. On the last occasion Ukabhai



September 18, 1976

was simply asked to leave, without being given even the choice of rejoining as a fresh hand. Ukabhai's 'crime' had been that he was a representative of the union. During the past two years he has climbed up the stairs to the labour department countless times, waited in hope for hours in the corridors outside the labour court and climbed down at the end heavier with disappointment. He awaits his last climb with hardly any enthusiasm, for court verdicts, even when they come and are favourable to the workman, do not necessarily mean the end of the tunnel. There are any number of workmen who have been sent back to courts on some pretext or the other.

There are many labour organisations and trade unions which have been functioning for long. There are over two hundred registered unions, mostly operating among workers of the smaller units. These are, of course, besides the giant TLA (Textile Labour Association). Some are affiliated to the central organisations, but the majority are 'independent', individual-based. Many of them are not operational at all. At any rate, it is hard to see the beneficial impact of unions on the condition of workers in the smaller units. There are still far too many small units where the workmen cannot take for granted even so elementary a facility as provision of clean drinking water. In a society like ours where labour legislation is not the expressed will of society, but rather a concession to workmen, its implementation cannot but be half-hearted and even reversible.

Life on the western bank of the Sabarmati is very different. It is striking for its placidity, which seems to verge on lack of vigour. The presence of several lakhs of toiling and struggling people just across, whose lives are not recorded for years even in the factory registers, let alone in the annals of the city — seems to have made hardly a mark on the minds of the intellectuals and social scientists on the west bank. Is it that there are no bridges between them and the people?

## Ireland

### Use of Torture

NOBODY can accuse the Irish government of being soft on the IRA. In fact, the most perfect harmony has

long existed between the British and Irish governments over the question of combating the Irish Republican Army Provos. The assassination of the British ambassador to Ireland last July, evoked not merely strong indignation, but a further intensification of offensive action against the IRA. Both the governments are agreed on the need to combat terrorism. Influential sections of British public opinion are even reconciled to eventual 'reunion' of the six counties, though of course such a union has to come about peacefully and voluntarily. The Irish government too seems reconciled to the situation, and there has been no great hurry to secure the fulfilment of articles 2 and 3 of the Constitution.

Considering the close political understanding that prevails between the two governments — which has not been allowed to be disturbed by "the crimes perpetrated by men of violence" and by "alien and sinister influences", by which is presumably meant what a Conservative spokesman on Northern Ireland described as "left-wing extremists operating within the IRA ... bent on transforming Ireland into a terrorist Cuba" — it is interesting to note that the government of Ireland has found it necessary to appeal to the European Commission on Human Rights for a "final adjudication" on the Commission's report that Britain was indeed guilty of the violation of human rights in its actions in Northern Ireland in 1971. Specifically, the European Commission found Britain guilty of practising torture in the interrogation of internees in Northern Ireland in August 1971. The Irish government had complained to the Commission in December 1971, and the report of the Commission was released early this month, though the substantive contents of the report had been leaked a week earlier.

If one bears in mind the kind of horrors perpetrated by various governments against their own people, not to speak of what the Americans did in Vietnam, one has to admit that the tortures of which Britain had been held guilty are not a patch on these distinguished achievements of other countries. Britain has also been absolved of practising discrimination against Roman Catholics in its torture; quite clearly, it was quite impartial in dispensing its skills. The British have however not lacked imagination and sophistication when it comes to practising a bit of torture; but these have ever been used in the case of natives of far off lands — Malaya,

India, Kenya, etc. In Northern Ireland, the torture techniques included "sensory deprivation caused by hooding the subjects, dressing them in loose-fitting clothes, and subjecting them to 'white noise'". Unlike the patient Orientals whose capacity to endure torture is alleged to be infinite, the Europeans, being more civilised, have lesser resistance, and when torturing them, one has to observe some rules of the game. It is these rules that Britain evidently did not observe, and has therefore been properly chastised.

But the Irish government, not being content with the bad marks awarded to the British government, has gone so far as to demand from the European Human Rights Commission a final adjudication. What does this mean? The foreign minister of Ireland is reported to have at the same time "appeared anxious ... to minimise the harm to Anglo-Irish relations that have arisen from the report. He said his government did not wish to 'exacerbate' the situation and had no intention of trying to make any propaganda points". But there is a propaganda point that is being made in the way the ERHC is being asked to adjudicate on its report. For, just two days before the report was officially released — and several days after its contents were leaked — the government of Ireland came before parliament with a proposal to declare, or rather, reactivate, a state of emergency (which was in fact declared in 1939, but had lain dormant since 1946). The following day, the proposal was approved and emergency measures were in operation. The provisions of the emergency include not merely the usual suspension of fundamental rights, etc, but also "a derogation from the European Convention on Human Rights to which Eire is a party".

Here is surely a lesson for all governments to follow. By pursuing the complaint to the EHRC against Britain, the Irish government has succeeded in avoiding what would be most fatal for any Irish government: being branded as a British lackey. At the same time, in view of the fact that Ireland itself, consequent upon the declaration of emergency and its 'derogation' from the European Convention on Human Rights, is entirely absolved of any responsibility to adhere to any human rights, any adjudication by the EHRC might give will be of no more than academic interest, and can be assumed to affect in no way the growing amity between the governments of the two countries.



## Clippings

The 20-point economic programme has created a very congenial climate necessary for the economic development of the country. Trade and industry must make the most of this "new phase" to achieve the objectives of social justice and economic growth without loss of time. This was the opinion which emerged at a conference on "Towards a Prosperous Society" convened by the Federation of Indian Chambers of Commerce and Industry (FICCI) here today to celebrate its golden jubilee.

*The Economic Times*, September 10

The standing committee of presidents of stock exchanges meeting here has "fully appreciated" various steps taken by the government to revive the capital market in order to enable it to meet the challenge of a growing economy, reports Samachar.

*The Economic Times*, September 13

The Union government today announced further liberalisation of policy regarding capacity utilisation to ensure maximum production and fuller utilisation of capacity already installed in the country.

*Financial Express*, September 10

Government of India has decided to sanction central capital subsidy up to Rs 15 lakhs even in those cases where project cost is more than Rs 1 crore, says Samachar.

*Business Standard*, September 13

The average annual economic growth rate in the revised Fifth Plan is estimated at 4.4 per cent against 5.5 per cent in the original draft.

*Financial Express*, September 15

Andhra Pradesh Chief Minister, J Vengal Rao, has said that he is not in favour of imposing agricultural income-tax on farmers. Inaugurating a general session of the State Development Conference here [Hyderabad] today, Mr Vengal Rao said he was the first chief minister to oppose this proposal when it was discussed at the Chief Minister's Conference.

*Patriot*, September 13

A wide range of production co-operation between India and the Soviet Union is likely. The possible fields identified are ready-made garments, processed foods, leatherware, army software, drugs and computer hardware. The co-operation may take the form of the USSR supplying inputs to India for production of items for export to that country.

*Business Standard*, September 11

An agreement was signed here [New Delhi] last month between India and the Soviet Union under which India will supply 30,000 tonnes of metallurgical equipment for steel plants to the Soviet Union.

*Indian Express*, September 15

The World Bank is expected to undertake a special study of India's capital goods industry with special reference to capacity created, its utilisation and demand pattern. The Bank will

also make in-depth studies on employment, family planning, health and education.

*The Economic Times*, September 16

Although the Indian Sugar Mills' Association decided to peg the free market sugar price at Rs 335 per quintal (exclusive of excise duty), in actual practice many sugar units were found charging an unofficial premium over the price fixed by ISMA. The agreement was observed more in its breach than in its observance.

*The Times of India*, September 13

Sugar production in the first 10 months of the current season was lower by 5.27 lakh tonnes at about 42.36 lakh tonnes as compared to 47.63 lakh tonnes during the corresponding period of the last season.

*Financial Express*, September 10

Trade union leaders expressed concern at the falling prices of raw jute immediately before the festival season, beginning in another fortnight's time.

*Business Standard*, September 12

The Union commerce ministry in consultation with the finance ministry has offered a soft loan of Rs 100 crores to the jute industry for launching an integrated programme of installation of balancing equipment, product diversification and modernisation of outmoded machinery in the jute mills during the next five years.

*Business Standard*, September 14

The Union minister for tourism and civil aviation, Mr Raj Bahadur, yesterday denied press reports that the government had put restrictions on the construction of five-star hotels in the country, says Samachar.

*Business Standard*, September 10

The Bihar cabinet today decided to provide a monthly pension of Rs 250 to all the legislators who have completed a five-year term. Those resigning their seats with a demand for dissolution of the assembly would, however, be not entitled to get the pension.

*The Times of India*, September 12

The All-India Congress Committee proposed to set up "Congress Bhavans" throughout the country at all the district headquarters.

*The Times of India*, September 10

About 40,000 Adivasis of Bhimashankar area of Junnar, Khed and Ambegaon taluka of Poona district have complained to the prime minister and the Maharashtra chief minister about the inhuman exploitation to which they are being subjected in the course of sale transactions of their forest produce.

*The Economic Times*, September 12

The Indian National Bank Employees' Congress (INBEC) has emerged as the major union of workmen in the banking industry with the decision of all circle unions of State Bank employees to affiliate themselves to the INTUC-led union.

*Business Standard*, September 11

The eleventh annual general body meeting of the Madhya Railway Kar-

machari Sangh and Paschim Railway Karmachari Parishad held in Bombay over the weekend called for the implementation in toto of the Miyabhai Commission Award.

*Free Press Journal*, September 13

The Maharashtra government has issued an order under the Defence and Internal Security of India Rules banning all strikes including go-slow conduct by the workmen of Messrs Rallis India Limited (Fan Division) for a period of six months from September 7.

*Free Press Journal*, September 14

The AITUC has called upon all its affiliated trade unions in the country to launch a campaign to press the demand that the payment of bonus should be discussed at the next meeting of the National Apex Body on 26 September.

*Patriot*, September 11

The Bihar government has decided to prescribe a limit of three children for its employees.

*The Times of India*, September 10

New entrants to government service in Tamil Nadu will, in future, be required to give an undertaking that they would restrict the number of children to two.

*Indian Express*, September 14

A three-day national seminar on population and law, which concluded here [Chidambaram] yesterday, urged the Centre to include family planning as one of the Directive Principles of State Policy enshrined in the Constitution and planned parenthood as one of the Fundamental Duties.

*Hindustan Times*, September 14

The home minister, Mr K Brahmananda Reddy, announced at the meeting of the consultative committee of the MPs on Nagaland legislation here [New Delhi] today that Nagaland was now completely free of underground activity.

*The Statesman*, September 10

The director of Nagaland Peace Council Dr M Aram said the former underground Naga leaders were having constant consultations among themselves with a view of evolving a consensus in formulating other issues for discussion for final settlement of the Naga political problem on the basis of the Shillong Accord.

*The Assam Tribune*, September 10

The overall circulation figures for dailies in the country have shown a downward trend for the six-month period from July to December 1975, as compared to the corresponding period last year, while the circulation of periodicals is going up.

*Free Press Journal*, September 11

The information and broadcasting minister, Mr Vidya Charan Shukla, yesterday stoutly refuted "canards" that the news agency Samachar was being converted into a government organisation, like All India Radio and Television.

*Amrita Bazar Patrika*, September 11



## Basic Problems Persist

Hansavivek

**TATA IRON AND STEEL COMPANY**, which recorded the highest profit of its career in 1974-75, produced 25,000 tonnes of saleable steel more and achieved 99 per cent capacity in 1975-76. Sales were marginally higher, but margins were sharply down and profits tumbled due to cost escalations and sluggish demand. Unsold stocks of steel rose to 2,90,000 tonnes, resulting in increase of Rs 4.5 crores in interest charges. Dividend is reduced, from Rs 8.30 to Rs 7.75 per share of Rs 75 each, which too is covered less than 1.8 times as against 2.7 times last year. The directors have decided to raise the paid-up value of equity shares to Rs 100 each, by capitalising Rs 12.86 crores from reserves. This is equivalent to issue of bonus shares in the ratio of 1:3. The management's intention is to pay a dividend of 8 per cent on the increased equity capi-

tal. The directors say that the price increases granted by government in October 1973 were neutralised by March 1975 by the cost increases and that during 1975-76 costs further escalated by about Rs 110 per tonne. The recessionary conditions in the steel market forced the company to offer rebates in certain categories of steel. Consequently, the average net price realised was about the same as in the previous year, notwithstanding the price increase of Rs 80 per tonne allowed by government from July 1975 to offset the price increases in coal and coke. The company, in fact, made substantial losses on nearly 30 per cent of its production.

JRD Tata, chairman, has complained that, over the last 30 years, the steel industry has been made to charge 'uneconomically low prices' to steel users. He points out that current

prices of structural sections allowed to Indian producers are lower today by about 65 per cent than in the UK, by 64 per cent than in the US, by 51 per cent in Japan, and 57 per cent in Australia. In the case of bars and rods, the gap is: 40 per cent in comparison with the UK, 43 per cent with the US, 29 per cent with Japan, and 38 per cent with Australia, while the ex-works price of plates in India is 56 per cent less than in the UK, 60 per cent less than in the US, 50 per cent less than in Japan, and 54 per cent less than in Australia. On top of this, government imposes on the industry the additional burden of ever-increasing excise duties which, on TISCO's product-mix, amount now to around Rs 381 per tonne. Tata says that the company's prospects for the current year, will depend on whether the recession ends, on the long overdue increase in steel prices — particularly on categories prices of which do not even meet cash costs —, and on a further increase in exports. The

### The Week's Companies

(Rs in Lakhs)

	TISCO		Synthetics and Chemicals		India Cements		Universal Cables	
	Latest Year 31-3-76	Last Year 31-3-75	Latest Year 31-12-75	Last Year 31-12-74	Latest Year 31-3-76	Last Year 31-3-75	Latest Year 31-3-76	Last Year 31-3-75
Paid-up capital	5000	5000	575	575	523	523	126	126
Reserves	7797	7555	478	368	188	126	286	248
Borrowings	8830	6345	279	295	939	926	158	133
of which Term borrowings	2570	2574	14	8	343	426	14	21
Gross fixed assets	39584	36657	1900	1870	2589	2564	518	511
Net fixed assets	14234	12730	420	444	1072	1165	145	161
Investments	1109	1101	13	8	39	39	38	34
Current liabilities	9676	10655	803	636	646	711	617	438
Current assets	15960	15722	1702	1472	1234	1083	1003	750
Stocks	11249	8968	892	1058	802	818	429	307
Book debts	4253	6227	744	347	411	259	550	431
Net sales	21677	21278	2230	1269	2895	2170	1644	1482
Other income	1571	1148	14	13	61	42	67	36
Raw material costs	6082	4826	1049	798	547	398	1157	981
Wages	5774	5135	208	182	206	187	100	85
Interest	957	511	42	45	123	134	24	18
Gross profit (+)/loss(—)	2887	4310	297	229	219	166	182	245
Depreciation provision	1620	1512	64	64	122	132	24	26
Tax provision	325	1280	160	75	—	—	101	152
Net profit (+)/loss(—)	942	1518	73	90	97	34	57	67
Development rebate provision	155	265	—	3	29	—	—	1
Transfer to reserves	304	742	—	28	21	—	32	46
Dividend								
Amount	P 84 E 399	84 427	P — E 86	—	P 8 E 39	—	P — E 25	— 20
Rate (per cent)	P 7.50&6 E 10.33	7.50&6 11.07	P — E 15	—	P 7.50 E 8	—	P — E 20	— 16
Cover (times)	1.76	2.71	0.85	—	1.56	—	2.28	3.30
Ratios (per cent)								
Gross profit/sales	13.32	20.26	13.32	18.04	7.56	7.68	11.07	16.43
Net profit/capital employed	4.34	8.03	5.98	7.27	5.88	2.6	10.00	13.21
Inventories/sales	51.89	42.14	40.00	83.31	27.70	37.07	26.09	20.68
Wages/sales	25.72	24.13	9.33	14.34	7.11	8.62	6.08	5.73



company has on hand a long-term programme of capital expenditure of Rs 165 crores, of which about Rs 125 crores are for plant modernisation and replacement and the balance for the development of the West Bokaro collieries, with a view to making the company self-sufficient in its coking coal requirements. The programme is to be spread over five to six years. Negotiations have been initiated with public financial institutions for term loans aggregating Rs 30 crores.

**SYNTHETICS AND CHEMICALS** is diversifying its activities. It is putting up a nitrile rubber plant with an annual capacity of 2,000 tonnes and expects to commence production thereon by the end of 1976. The company is seeking financial assistance of Rs 1.10 crores from various financial institutions. ICICI has already agreed to give a loan of Rs 30 lakhs for financing this project. Meanwhile, the company is trying to have converted the 'letter of intent' in respect of vinyl pyridine lattices and monomer into an industrial licence and is also negotiating for a foreign collaboration for the project. It has also received 'letters of intent' for annual manufacture of 2,000 tonnes of acrylonitrile butadiene styrene (ABS) plastics, 6,000 tonnes of acetone, and 60 tonnes of butadiene catalyst. BD catalyst, which is required by the company in manufacture of SBR, is at present not manufactured anywhere in the world. The company has arranged foreign collaboration for this project and is awaiting government clearance. After a steady fall in production and sales over the last preceding three years, S and C has recorded a fair recovery in 1975, with production and sales at 22,712 tonnes and 24,593 tonnes — against 17,660 tonnes and 15,602 tonnes respectively, in the previous year. Although net sales expanded by 76 per cent, to Rs 22.30 crores, gross profit could rise by only 30 per cent to Rs 2.97 crores. Profit at the net level, however, was lower than last year's. Thus the recommended dividend of 15 per cent was not fully covered by earnings. Synthetic rubber prices have been decontrolled by government from March 9, 1976. Commenting on the 1975 performance, the directors say that the Central government increased price of alcohol by 28 paise per litre from October 31, 1975, and government of UP imposed a pur-

chase tax on alcohol with retrospective effect from May 2, 1974, at 40 paise per litre on the first 10 lakh litres and 20 paise per litre on the balance. The full impact of the purchase tax, at the rated capacity of 30,000 tonnes, would come to about Rs 1.5 crores. The company has filed a writ petition in the high court challenging the state government's act. The workers at the Bareilly factory have demanded a production incentive scheme which is not admitted by the company. The matter has been referred to the industrial tribunal. The employees at Bombay have also made demands for increase in salary, etc, which too are not admitted by the company. The company's foreign exchange earnings during 1975 were barely Rs 26,968, whereas it spent as much as Rs 2.24 crores in foreign exchange on imported raw materials, continuing knowhow and technical service fees, travelling expenses, etc. The company has remitted the tenth and final instalment of technical service fees to Firestone Tire and Rubber of US.

**INDIA CEMENTS** owes its good results to the substantial increase in output following restoration of full power from July 1975, availability of adequate supplies of coal, increase in retention prices of cement from October 1975, and improved export performance. Combined capacity utilisation of both of the company's factories worked out at 88 per cent — which equalled to the average utilisation for Tamil Nadu. Profit margins, however, turned out to be a shade lower than the previous year, even though sales were 33 per cent higher. This was due to considerable increase in the costs of major inputs. Moreover, performance of the foundry division was affected by severe power cuts in the first quarter and a strike in the second. Production was 25 per cent lower than in the previous year. Commenting on the increase of Rs 18.60 per tonne in the price of cement allowed by government, the directors say that not only had the company lost the benefit of this increase for three months on account of the delayed announcement which cost it about Rs 35 lakhs, but that it had also to suffer a disadvantage of about Rs 12 per tonne in the matter of freight charges on coal along with other units in the Southern region. As against an assumed all-India average lead of 975

km for coal, the actual distance of the company's factories is about 1,800 km. Besides, there are other disadvantages on account of certain levies and imports in Tamil Nadu which do not obtain in other states. The company was able to export 1,05,780 tonnes of cement as against 73,417 tonnes previously. It earned Rs 3.38 in foreign exchange, while it spent only Rs 27 lakhs on imported raw materials, spare parts and on interest, etc. It took up, for the first time in India, manufacture of 'high sulphate resistant cement' which is used in constructions in sea-beds and in areas close to the sea where corrosion takes place due to high sulphate content in the sub-soil water. The company was able to export to Iran and Iraq against international competition. Until recently, this variety of cement was produced and marketed in the Middle East by European countries and Japan. The company hopes to export over two lakh tonnes of cement this year.

**UNIVERSAL CABLES** earned a lower profit despite higher production and turnover. The directors attribute this outcome to the demand recession in the electrical industry and rise in raw material and other costs. The company was able to increase sales by concentrating more on speciality cables and exports, but margins came under severe pressure. Even so, dividend is being stepped up by four points to 20 per cent. The company is seeking a licence for import of plant and equipment, and also approval for a foreign collaboration for manufacture of cross-linked polyethylene (XLP) cables. The project, taken up following the government's directive to the industry to replace PILC cables upto 11 kV by XLP to save foreign exchange, is expected to be commissioned towards the end of 1977. The properzi mill produced more rods last year, following improved availability of EC grade aluminium ingots. Output of capacitors was also increased. The company has developed a new technique for manufacture of high voltage power capacitors using polypropylene film, but it has sought approval for technical collaboration for this purpose. The company's foreign exchange earnings amounted to only Rs 1.12 crores, whereas it spent as much as Rs 4.53 crores on imported raw materials and components, interest, travelling, commission, etc.



NEW DELHI

## Embarrassment of Riches

B M

THE experienced and highly sophisticated group of 'aid diplomats' in New Delhi currently find themselves in somewhat of a quandary. Their task was never easy, especially in the last few years of what is euphemistically called deterioration in the aid climate. But they brought to bear on their aid solicitation a degree of ingenuity and refinement which was impressive. This is testified by the higher quantum of aid inflow in the last three years in particular, even in the face of so many political impediments. They were naturally elated when the World Bank gave a public chit applauding the good management of the economy last year. Unlike the past practice of World Bank reports being kept confidential, it was mutually agreed to give this report wide publicity. This was expected to overcome the so-called aid-weariness in the donor countries and to counter propaganda that aid-receiving countries were squandering concessional aid and that, especially in the case of India, aid was going into a bottomless pit.

It is, however, the improvement in India's economy which has come about in the last two years, and in particular the improvement in the balance of payments and foreign exchange reserves position, which is now posing problems for the aid diplomats. Reports are coming in that the IMF proposes to make a fresh assessment of eligibility for its short-term financing schemes such as the interest subsidy account for the 1976 oil facility and trust fund which was set up in May last to provide balance of payments assistance out of profits accruing from the sale of gold by IMF. Since India is beginning to show marginal trade surpluses in the last few months and its foreign exchange reserves are becoming comfortable, there is danger of India being adversely affected by the proposed review of the list of member-countries eligible for assistance under these schemes. The issue is likely to figure in the coming Fund-Bank meeting in Manila in October.

The aid diplomats' bigger worry, however, is about the flow of development aid. Here too some difficulties appear to be arising, though they are not of such an imminent nature as is the

case with short-term IMF financing of balance of payments deficits. This is indicated by the nervousness which is shown by the more experienced of our aid diplomats whenever too much prominence is given to our comfortable foreign exchange position. They advise caution on this score and point out that the position is still not as good as is made out by the total figure of Rs 2,100 crores (excluding gold and SDRs) of foreign exchange reserves. Aid flows have played a considerable part in the building up of reserves. A more important contribution, however, has been made by remittances from Indians abroad which should be rated as an uncertain factor. It is also suggested that accruals to reserves on this account are not easily available for investment purposes of a long-gestation nature. Nothing should be said or done, in fact, according to the aid diplomats, which would weaken in any way India's case for concessional aid flows for development purposes as distinct from short-term balance of payments financing.

An important feature of the present aid flows, especially from the World Bank, it is further pointed out, is that they are earmarked for projects and programmes which do not require foreign exchange at all or on which spending of foreign exchange is minimal. The special emphasis on aid for rural development and relieving poverty given by World Bank President McNamara is adding a new orientation to foreign aid flows. The role of such aid is obviously vastly different from that of aid for infrastructural and industrial development. It does not cover the cost of foreign supplies — machinery, equipment and technology — such as are required in the latter case. The new kind of aid meets the rupee costs of projects and programmes; in addition, it also helps to augment foreign exchange resources which can be used for other purposes, including the bridging of trade and payment gaps when necessary.

The new kind of aid has, of course, to be clearly distinguished from food aid and aid in the form of items of current consumption such as India received from the USA on a massive

scale under PL 480 arrangements. Such aid added to available supplies in the economy and relieved current shortages. It also generated rupee resources through the sale of these supplies in the domestic market and therefore provided an important prop to the budget. There was, however, no immediate repayment obligation in foreign exchange.

The implications of reliance on the new form of aid for agriculture and irrigation project as well as such purposes as rural credit and a whole host of similar programmes have to be clearly understood. Rupee resources have to be found to execute projects which are undertaken against aid but to which foreign aid makes little or no contribution. Meanwhile, foreign exchange received against such aid might tend to obscure the real foreign trade and payments position and might encourage a certain laxity in foreign exchange spending. If PL 480 aid acted at one time as a substitute for the effort required to raise domestic resources for development, the new form of aid may indeed dampen the effort needed to raise both domestic and foreign exchange resources for development on a self-reliant basis.

There is another aspect of this form of aid which has been examined in some detail in Yojana Bhavan. This is its implications for planning and programme implementation. A note on the subject prepared in Yojana Bhavan pointed out some time ago that foreign experts have to be associated with aid-financed projects and programmes. The experts come with pre-conceived notions and are not familiar with distortions in planning, implementation and appraisal of projects. The aid for such projects is always subject to matching contributions from the budgetary resources or financing institutions in India. This results in a significant portion of available resources being tied to aided projects, in preference to others which might have otherwise enjoyed priority. This has its own implications for the pattern of development. There is also a tendency for over-mechanisation and excessive use of trained manpower and sophisticated equipment. The impact on the attitudes of high officials and their engagement in frequent conferences with visiting World Bank officials and experts is an imponderable which requires separate attention in this context.

Even while the aid diplomats are



worried about the problems they will have to tackle to ensure a steady flow of aid in the future, their colleagues in the Finance Ministry are beginning to worry about the use to which the swelling foreign exchange reserves might be put to best advantage. The present easy foreign exchange position is something of a novel experience for officials of the Finance Ministry. Plagued by foreign exchange stringency for over two decades, the tendency on their part has been to hoard the reserves or to merely earn interest on them in world capital markets. This is, of course, not

an optimal use of the reserves. It is now being realised that to the extent financial assets can be converted into physical supplies of needed inputs for stepping up production and investment, the drawing down of reserves might prove beneficial. Action along these lines is being initiated. But the accent is still on maintenance imports which have the double advantage of helping better utilisation of established capacities as well as generating rupee resources of which there is currently even more acute stringency than of foreign exchange.

bales, has already tilted the balance against the growers. They have been forced to sell in a buyer's market. The industry in turn has successfully shorn itself of any responsibility for holding the fibre price. It has been shouting from the house-tops about its financial difficulties for such a long time that almost everybody has now come to believe that it does not really have the money to purchase much of raw jute. And if its buying is small, the ruling price has also to be lower.

## JUTE

# Grower Thrown to the Wolves

FOR all the best intentions of the authorities, raw jute prices are now ruling at below the statutory minimum floor in many jute-growing areas. The rate of arrival is picking up; it generally reaches its peak just before the Durga Puja which falls this year at the end of September. But already there is sufficient evidence that unless some magic solution is devised in the meantime, it would be nearly impossible to restrain the steady downward drift in the fibre prices.

### CHRONIC PROBLEMS UNSOLVED

The plan to ensure remunerative prices to growers is of course ready. The Union Commerce Ministry has arranged with the Reserve Bank to advance any amount of credit that the Jute Corporation of India might need. The JCI has been told that money would be no problem and that it should go ahead as fast and as far as it needs to.

And there lies the rub. Even after four years of experience the Corporation is still to find a way out of some of its more chronic problems. There is the problem of not having enough trained personnel to run the direct purchase centres. The Corporation's go-down capacity is also not adequate to back up a massive purchase operation. And what is more important, the JCI's presence is still largely limited to the secondary markets whereas most growers sell their produce in the primary markets where representatives of the trade are active.

The new chairman of the Corporation, Santosh Kumar Roy, feels that one of the ways of circumventing these problems lies in gearing co-operatives to make more purchases. He

has even a plan to funnel some of JCI's funds to the more efficient co-operatives to bolster up their finance. This is being done, he says, by the Food Corporation of India for instance in the case of food procurement and there is no reason why this could not be done in raw jute.

There is no sense in prejudging the scheme till it has been tried. Roy has already visited a large number of jute-growing areas and has held talks with officials of the state governments in the region about assigning a bigger role to the co-operative set-up. But the fact is that money alone will not be able to energise most of the co-operatives which are bedevilled by serious organisational problems. Putting in more money into the co-operative system without first toning up its structural framework might not be the best means to ensure proper utilisation of the funds.

In the meantime the irrepressible jute industrialists are once again at their familiar game of denying the growers a fair price, this time in a more clever way. The new system of gradation of raw jute in terms of WI to W8 in place of the earlier one of Assam Bottoms and the like has come in handy for the trade and industry to fool the simple growers. The growers are yet to learn the fine distinction between different grades and their respective prices and when the trade agents buy a better type of fibre by paying the price for an inferior grade, they just fail to understand that they are being cheated.

What is more, a large crop, which should not be less than 7.3 million

One of the ways of countering this rather facile line of reasoning would have been to ask the industry to face a thorough probe into its finances and find out where all its profits of the yesteryears have gone. In fact even now at least a few of the mills are not doing badly and these mills between themselves are monopolising all the export business. It is also time that the common allegations that the industry indulges in various types of underhand deals like overinvoicing and underinvoicing were looked into and decided once for all.

### MAIN GROUSE

One of the industry's main grouses at the moment is that it is being forced to carry a huge inventory of unsold jute goods which is blocking up all its liquidity. The outstanding stock has been put at about 170,000 tonnes made up of sacking, carpet backing, hessian and the other constructions. The industry's demand is that the government should immediately devise some methods of liquidating this stock and thus enable the industry to have the working funds to meet its other commitments as well as to purchase raw jute.

The Directorate General of Supplies and Disposals has not yet come out with any policy statement as to how much jute goods it will buy and at what prices. It continues to operate on an *ad hoc* basis; it bought about 33,000 tonnes in early September at prices varying between Rs 287 and Rs 297 per 100 bags of B Twills but the industry holds that the purchase was too small and the price was unremunerative. The industrialists are as usual using this indecision to their advantage. There are reasons to believe that their agents are now buying raw jute at prices dictated by them and are trying to build a low-priced inventory for the coming year. In the end it is the growers who suffer.



## CHANDIGARH

## People Prevail over Plan

Victor S D'Souza

THE new city of Chandigarh was inaugurated by the President of India in 1953. Although intended to provide a capital for that part of Punjab which remained in India after partition and to help rehabilitate the disrupted institutional and cultural life of the displaced persons, the new venture had a wider national significance. The import of this experiment was brought out by Jawaharlal Nehru, when he paid the first visit to the site of Chandigarh, in the following words: "The site chosen is free from the existing encumbrances of old towns and old traditions. Let it be the first large expression of our creative genius flowering on our newly earned freedom". Chandigarh was to be unique in other respects also. Unlike most planned towns which are designed as satellites to existing large cities or to subserve the needs of a new industry, Chandigarh was planned as an autonomous city free from the dominance of any neighbouring community and complete in all respects, fully equipped to serve all the needs of its residents. The world's best known city planners and architects were chosen to give shape to this bold vision. The firm of Albert Mayer and Whittlesey of New York was first given the contract, and when the firm had to give up the assignment after some preliminary work, the celebrated French architect and city planner, Le Corbusier along with Maxwell Fry, Pierre Jeanneret and Jane Drew was invited to complete the work.

There is much in Chandigarh to please the eye. The enchanting scenic beauty of the backdrop, the streamlined road system with its parkways and avenues, monumental buildings and spacious plazas, the delightful artificial lake and the fabulous rose garden, have been attracting a large number of tourists from all the world over. So pleased are the planners and administrators with their creation that they have proudly named Chandigarh the "City Beautiful". There are also other aspects about Chandigarh which are sometimes held out as indices of the success of urban planning. The population of Chandigarh has grown very rapidly; from almost nothing at the inception of the city it had risen to 219,000 in 1971; between 1961-71 alone it had risen by 146 per cent. In the last decade or so the land values

have risen around 15 times.

However, a city develops essentially in response to the needs of the people. The planned features of the city have to be integrated with the growing human needs in right proportions. In a changing society with new values and aspirations, planning can be used as an instrument for the realisation of new goals. In a developing society such as that of India it is these perspectives of planning which are more important than any mainly aesthetic or monumental criteria. Therefore, the success of planning should largely be judged in terms of the degree of congruence between the planned features on the one hand and the needs of the people and goals of society on the other.

Viewed thus, behind the appearance of glamour one may discern some serious problems in Chandigarh. A few of them may be briefly indicated. The housing problem has assumed colossal proportions. According to the 1971 census 38 per cent of the households occupied one room with an average of 3.4 persons per room; and another 35 per cent of the households had two rooms each with an average of 2.3 persons per room. Unable to find accommodation in the regularly planned houses, about 13 per cent of the households were living in slums, either in squatter settlements or what are called labour colonies, where they are left to fend for themselves. Between 1961-71 while the population of the city as a whole increased by 146 per cent, that of the slums increased by 230 per cent. The number of slum dwellers is swelled not only by new immigrants but also by people who are thrown out of the planned houses because of prohibitive rents. An even larger number of migrant people who 've off Chandigarh reside in the fringe villages, where the demographic picture is undergoing sharp changes. Because of overcrowding in houses the densities of sectors which are large neighbourhoods and are treated as planning units, have in most cases overshot their targets. In one case, for instance, as against a stipulated maximum of 15,000 the actual population in 1971 was over 25,000, thus overstraining the available amenities.

The failure of planning to meet the housing needs is equally matched by

its failure to cope with the commercial activity of the City. A survey of commercial establishments conducted in 1971 revealed that in addition to 2,359 shops in the planned shopping areas, there were 686 makeshift shops locally called *khokhas*, 1,414 mobile shops or *rehris* and 425 squatters who were all plying their trade without authorisation.<sup>1</sup> Even among the planned shops there was subletting in as much as 10 per cent of the cases. The growth of commercial slums, therefore is in no way lagging behind the growth of residential slums.

Likewise there is a growing transportation problem. The street system as it has been developed so far is admirably suited to the convenience of the automobile users. Not enough attention has been paid to the needs of the users of public transportation, the cyclists and the pedestrians who constitute about 95 per cent of the population.

Slums and shanty markets are phenomena which are readily visible. But there are other deleterious aspects which are not so obvious but which are nonetheless pervasive in the civic body of Chandigarh. Chief among these are the growing class differences and class cleavages. The religious and caste features which are an integral part of traditional Indian communities have been rendered relatively ineffective in the residential arrangements in this new city. But in their place an equally callous structural element — that of the class difference — has taken root. Planning has not fostered a cohesive and progressive community; instead there are cleavages between different economic categories which have tended to perpetuate themselves in a manner contrary to the professed aims of a democratic society. The upper and the middle classes who constitute the smallest proportion of the city's population are by and large the beneficiaries of the planned amenities. They are unconcerned about the problems of the lower strata who constitute the majority. On the other hand, even among the persons belonging to the same stratum, particularly at lower levels, there is no love lost between the neighbours because of the sharing of crowded accommodation and overstrained amenities. The absence of a local self-government provides further scope for the continuing fragmentation of the community.

These then are some of the problems of the planned City of Chandigarh. They are also problems of most unplanned cities in the country. One may therefore argue that one cannot have an



island of planned blessedness in the midst of the ocean of unplanned confusion and misery. Yet it can be seen that many of the problems have arisen with the unfolding of the plan itself, as a result of the decisions which the planners have taken or failed to take in the face of changing circumstances. A brief account of the major factors in the genesis of some of these problems may illustrate the point.

During the first decade or so of planning there was hardly any housing problem. Although the population was growing rapidly the housing units too sprung up fast. The major factor in this easy situation was the government's policy of housing its employees who formed a substantial section in this administrative city. But in course of time the pace of the government's house construction activity could not match with the periodic increases in the number of government employees, mainly as a result of political changes, as for instance, when the State of PEPSU with its capital at Patiala merged with Punjab in 1956, and more especially in 1966 when the erstwhile State of Punjab was reorganised into the present States of Punjab and Haryana and the Union Territory of Chandigarh, with Chandigarh as the capital of all the three administrative units. Until the housing stock was adequate, plots were selling at developmental cost and rents were cheap. But the moment the demand for housing began to outstrip the supply, land values and house rents took an upward trend. At this critical juncture, instead of quickening the house construction activity, the authorities adopted the policy of auctioning the plots with a view to profiting from the rising land values. Only a limited number of plots were put up for sale at each auction so that at successive auctions the land values went on spiralling. In the meanwhile the gaps between the housing needs and housing supply and between the rates of house rents and the ability of people to pay, went on widening, resulting in the acute housing problem.<sup>2</sup> The subsequent policies of auctioning plots on lease-hold basis and controlling house rents have inhibited house construction activity even further.

The slum problem has been allowed to grow because of misconceptions about the relationship of the slum dwellers with the community. They were regarded as a transient population catering to the temporary needs of the community such as building and road construction, and other services necessary before the development of the planned

facilities. The realisation is now dawning upon the authorities that the slum dwellers are as intimate a part of the community as the people living in planned houses.

The shopping centres in Chandigarh were carefully planned with due regard for the requirements of the neighbourhoods as well as the larger segments of the community. But the unauthorised shanty markets have grown side by side with the planned shops all the same. Their rise is analogous to that of the slums. They are welcomed in the initial developmental stages of a sector so that the planned shops can be auctioned at higher prices when the market demands are built up. Subsequently prices of commodities sold in the planned shops become exorbitant because of high establishment costs and so that shanty markets with lower prices become more popular with the customers. However, because of the growing dimension of the problem, it is now believed that *khokhas* and *rehris* are necessary to satisfy the cultural habits and emotional needs of the people.

The street system is another feature of planning which had received the utmost attention in the design of the General Plan. As many as seven different types of streets were prescribed to suit different types of traffic. But in their implementation so far the special requirements of the cyclists and the pedestrians who represent the overwhelming majority of the mobile population have not been met. According to the original stipulation, in the grid-iron street pattern of Chandigarh, for maximum efficiency the public bus transportation system was to be operated along a series of parallel roads both horizontal and vertical, and only the roads in between the sectors were to be used for the purpose. But instead of the planned pattern the bus service meanders through the market roads cutting across the sector, which are in fact designed to discourage fast traffic. Thus public transportation has become slow, cumbersome, and expensive.

The class character of the population has been built into the planning of the residential areas. To begin with, a plot was treated as a residential unit intended for a household. The plots were carved out in different sizes ranging from about 125 square yards to 5,000 square yards to suit the economic capacities of different categories of people. The government houses were divided into thirteen different types to take account of the salary and status differences among different categories of employees,

from commissioners to peons. These different plots or types of houses were distributed in clusters of each kind, thereby rendering each neighbourhood socio-economically homogeneous and different neighbourhoods unequal. A sector which is in most cases, half by three-quarters of a mile in area, may have several such neighbourhoods but usually has one or the other preponderant class of people, giving the entire sector the character of a particular class.

The class differences are by and large perpetuated, among other devices, through the school system. Although every sector is provided with a neighbourhood school, schools vary with regard to management, medium of instruction, fees charged and quality of education provided, and variation in these matters is related to the class background of the pupils attending schools. Because of this, very often, people in a sector prefer to send their children to a school in another sector. Sector 14 which houses the teachers and administrative staff of the Panjab University is a case in point. Few of the teachers and higher administrative staff residing there send their children to the neighbourhood school. The socio-economic background of the parents is thus a very important factor in the educational opportunities for the children even in the planned city of Chandigarh.

These illustrations are sufficient to demonstrate that many of the problems could have been minimised if not totally avoided, by suitable planned measures. However, even the best plan cannot visualise all the future needs; planners have therefore to continuously react to problems as they arise and redirect growth and development along new channels. The cumulation of problems in Chandigarh bespeaks of the failure of the authorities concerned on this front.

It is true the authorities are not unmindful of the turn of events; they are, in fact, bestirring themselves, although belatedly, to retrieve the situation to the extent possible. Three kinds of reactions on their part are discernible. First, where they have not succeeded in enforcing the plan norms, they are legitimising the trespassers on the ground that the deviations are in accordance with the socio-cultural needs and economic standards of the people. Thus the multiple occupation of a building in a plot has been recognised and the unauthorised construction of residential accommodation on the second floor of the building is now allowed.



The shanty markets and mobile shops are being regularised. Secondly, where the planners themselves have deviated from the stipulations of the General Plan, efforts are being made to revert to the original proposals. Accordingly the street system is being revamped paying heed as far as possible to the convenience of the cyclists and pedestrians. Changing the public bus transportation system in accordance with the original idea is under contemplation. Thirdly, attempts are made to assess the needs of the community, and redirect planning accordingly. The maximum and minimum sizes of plots have been reduced from 5,000 square yards and 125 square yards to 500 square yards and 46 square yards respectively and the number of types of government houses has been reduced from thirteen to seven. A Housing Board as a separate agency has been set up with a commitment to construct a large number of housing units specially geared to the needs of the disadvantaged sections.

These are all examples of gallant efforts to set the course of planning on an even keel. Nevertheless one cannot help expressing one's misgivings about the future of planning in Chandigarh. First of all the gravity of the problems renders sustained improvement very difficult. Secondly, it is doubtful whether some of these solutions touch the basic issues. For instance, the authorities have yet to apply their mind to the fundamental question of land policy. And finally, the more important obstacle to planning is that the authorities concerned do not have a firm basis to operate upon. Vagueness and uncertainty has been dogging the planning process in Chandigarh right from the start. Part of the General Plan was prepared by the firm of Albert Mayer, and Whittlesey; Le Corbusier and his associates modified it. But none made it a point to state explicitly the goals and objectives which should be the governing principles of any plan. It is therefore strange but true that no one knows what precisely planning is supposed to accomplish in Chandigarh.

Another aspect of this lack of basis for planning deserves notice. It was recognised from the very beginning that in order to be able to plan along proper lines the authorities should have control over the periphery of the city also. Therefore a periphery control Act was passed by the government. The provisions of the Act extended to ten miles all around Chandigarh, and the Act was intended to check haphazard and unplanned development in its vicinity and preserve the rural character of

the area for meeting the city's requirements in respect of agricultural produce, and dairy and poultry products. But with the reorganisation of the previous State of Punjab in 1966 almost all the peripheral area has gone to the successor states of Punjab and Haryana. The Chandigarh Union Territory now has a land area of barely 114 square kilometres of which 60 square kilometres is covered by the city of Chandigarh and the rest by the town of Mani Majra and a few fringe villages, not suitable for planned expansion. Thus Chandigarh has lost not only the control over its periphery but has been deprived of its leeway for further expansion.

Chandigarh was intended to be developed in several stages to accommodate ultimately a population of 500,000. The first phase of 301 sectors was meant for a population of 150,000. Seventeen more sectors have been added in the second phase with no further space for expansion. If these 47 sectors have eventually to accommodate 500,000 people the population density would be far thicker than what was envisaged in the beginning. But the planning problem is much more complex than what is indicated by scarcity of land and thickness of population. Even before the reorganisation of the erstwhile state of Punjab the idea of peripheral control received several setbacks with the locations of the Hindustan Machine Tools complex, the military cantonment and the air force station in the vicinity of Chandigarh. With the transfer of the peripheral areas to Punjab and Haryana, the governments of both these states have set up urban industrial estates at Mohali and Panchkula respectively, which almost adjoin Chandigarh. These growing urban complexes including the town of Mani Majra are now nothing but extensions of Chandigarh. The interstitial spaces are being quickly filled up. This rapid urbanisation and industrialisation of its periphery is having serious repercussions for Chandigarh; of its jurisdiction over the periphery, Chandigarh can do very little about dealing with these problems in a planned manner. This factor, more than anything else, has rendered city planning in Chandigarh highly problematical. The establishment of a regional planning authority cutting across different political boundaries might provide a partial corrective. But whatever may happen, Chandigarh can no longer answer to the vision of Le Corbusier who conceived it as an organically integrated community, or to the dream of Nehru who wanted it to be the image of a new society.

"City Beautiful" is the name given

to the classical forms of city planning in the West, which emerged toward the end of the 19th and the beginning of the 20th centuries. These forms were characterised by bigness of size, great plazas, broad avenues, monumental buildings, wide open spaces, fabulous civic centres — all out of proportion to, and out of tune with the needs of the people, inhibiting them. It is the people who had to adjust themselves to the imposing structures, rather than the structures serving the people. As the foregoing discussion has shown, planning in Chandigarh has displayed something of the character of the classical form of city planning while the life of the community has developed regardless of the standards laid down by the planners. How fitting it is, therefore, that the authorities should have christened this place the "City Beautiful", although they could not have had in mind the conventional meaning of the term!

### Notes

- 1 Gopal Krishan and S K Agarwal, "Commercial Pattern of a Planned City: Chandigarh", *The National Geographical Journal*, June 1978, pp 83-91.
- 2 For more details, see Victor D'Souza, "Problem of Housing in Chandigarh", *Urban and Rural Planning Thought*, October 1978, pp 254-266.

### Vanjinad Leathers

VANJINAD LEATHERS, a joint sector company, has set up at Thrikkannapuram, in Malappuram District of Kerala a plant for manufacture of finished leather. The plant has a licensed capacity of nearly 450,000 square metres of finished leather annually. The company is expected to go into production this month. A special feature of the project is the elaborate effluent disposal system installed at a cost of over Rs 4 lakhs, claimed to be the most modern in the leather industry in India. The project cost, estimated at Rs 165 lakhs, is being financed by share capital of Rs 60 lakhs, term loan of Rs 90 lakhs and central subsidy of Rs 15 lakhs. Out of the proposed total issued capital of Rs 60 lakhs, the promoters' share is about Rs 31 lakhs. The balance amount will be raised by issue of 2,94,000 shares of Rs 10 each to the public on September 22. The issue has been fully underwritten. The government of Czechoslovakia has offered to depute two leather technologists for the project. Finished leather from India is in great demand and has vast export potential. VL will export over 60 per cent of its production and earn over Rs 1.5 crores in foreign exchange annually.



## MADHYA PRADESH

## Innocents All

N K Singh

THE long-awaited report of the Bhave Commission, which inquired into the alleged irregularities connected with the export of gulabi gram, scarcity relief funds and the purchase of school mats (*taltpatti*) in the sixties, has come as an anti-climax. In its report placed recently on the table of the MP assembly, the one-man judicial commission has exonerated D P Mishra, then chief minister, and his food minister, Gautam Sharma, of the charge of amassing wealth from out of the policy of exporting gulabi gram. The Commission also held that the export policy was not aimed at compelling the traders to contribute to party funds. While it held that there was excess of expenditure in the scarcity relief works at Damoh, the Commission exonerated K B L Guru, then revenue minister, of the charge of deriving undue advantage out of it. Similarly, Dharmpal Gupta, then education minister, and his deputy, Hetram Dube, were found not responsible for the irregularities connected with the purchase of school mats.

Ever since May 1975 when the Commission submitted its report to the government, speculation was rife about the supposed "politically explosive material" which, it was thought, would damage the ruling party's image. Basing itself on "usually reliable sources", even the pro-Congress *Hitavada* had speculated that the Commission had taken a "critical view of the people at the helm of affairs who collected funds for the party by ignoring norms". The speculations were rife due to the abnormal delay of 16 months in the release of the Commission's report — the government should have placed the report on the table of the House within six months of its submission, as the enquiry was instituted by the state assembly. Even the former chief minister, P C Sethi, under whose regime the Commission was constituted, had to publicly demand the release of its report.

The Commission had been set up on November 10, 1972 to enquire into three scandals connected with two former governments. While the gulabi gram and scarcity relief works scandals took place during the regime of D P Mishra, the school mat scandal happened during the SVD regime. There was quite a commotion at that time. It was

then alleged that the holding of the enquiry was a politically motivated decision — to malign D P Mishra and Gautam Sharma. The appointment of the enquiry commission embittered the relations between Mishra and Sharma on the one hand and Sethi on the other. The enquiry took about two and half years to be completed, and has cost about ten lakh rupees. During its marathon sittings several important persons, including D P Mishra, appeared before the Commission.

## GULABI GRAM

Gulabi 'channa' is a variety of gram that grows abundantly in Madhya Pradesh, and it is exported to neighbouring states, especially Maharashtra. It is a chewing variety and lends itself to the dry, roasted preparation called "chivda". In price it ranks between "desig" gram and "kabuli channa".

1965 was a period of drought and famine in many parts of the country, including MP. Traders were buying gulabi gram from cultivators at prices ranging from Rs 75 to Rs 80 per quintal and selling it at Rs 150 in neighbouring Maharashtra. In an effort to protect the interest of both cultivators and consumers, the MP government declared a ban on the export of gulabi gram. From then on, only the state Apex Co-operative Marketing Federation was to purchase gram for the export market from traders at a fixed price of Rs 95 per quintal. The Federation was to sell only to parallel co-operative agencies in other states, and at not more than Rs 130 per quintal. The state government also hoped to benefit from the scheme by way of administrative charges at the rate of Rs 10 per quintal to be paid by the apex body.

Predictably, the traders were not satisfied with their margin, having been used to more than 90 per cent profit before the ban. During the following year most traders bent their energies to sabotage the entire scheme, refusing to part with their stock to apex. Some resorted to smuggling across the border. By December 1966, however, the hoarders began to worry about disposing of their rapidly deteriorating stocks before the March harvest. Some of them petitioned to chief minister D P Mishra to lift the ban, offering to compensate the

government for the loss in administrative charges — and even volunteering to donate twenty per cent of their stocks (no doubt, the heavily-weevilled portion) to the Bihar Relief Fund.

They were never called upon to make good these offers. On January 8, 1967, the state government unconditionally suspended the ban. Export was now legal under permits. In no time, gram bought at Rs 80 a quintal was sold at upto Rs 220 in Maharashtra.

The Bhave Commission found that a total of about three lakh quintals of gram was exported in January and February 1967. The loss to the state exchequer was about Rs 30 lakhs in administrative charges. The Commission accepted the plea of D P Mishra and Gautam Sharma that the export-ban was lifted because apex and the Food Corporation of India had not succeeded in procuring and clearing the huge stocks in the state, and that it was imperative that this be done before the March harvest. The Commission also agreed that the object behind the adoption of the earlier procedure of entrusting monopoly export rights to the apex was not to increase the stocks of gulabi gram deliberately with the traders nor to compel them to contribute to party funds.

Though the Commission has commented on some irregularities, it is not clear from the official summary of the report who is responsible for them. The summary quotes certain observations made in the report by the chairman of the Commission without mentioning its context.

## SCARCITY RELIEF FUNDS

An earlier non-judicial body (Nagar-katti Committee) had named the then revenue minister, K B L Guru, as being responsible for the wastage of public funds in the scarcity relief works undertaken during April 1964-March 1968 period. The Bhave Commission, too, agreed that there was excess expenditure on relief works. Adequate justification did not exist for starting relief works at some of the places. The provisions of the Scarcity Manual were not strictly followed, and sufficient control was not exercised on expenditure. Only the works undertaken in Damoh district were audited while work undertaken at all the places should have been audited. A government officer, who was posted at Damoh during the relief operations, and his family, were found in possession of "such property for the holding of which he could not tender any sa-



tisfactory explanation". The Commission commented that it was Guru's responsibility to ensure that the relief works were conducted properly. It was also incumbent on him to have ensured control on revenue officers and to have seen that no wasteful expenditure was incurred. However, the Commission concluded that no evidence was tendered before it to show that the minister had derived any undue advantage out of the excessive expenditure on Damoh works.

#### SCHOOL MAT PURCHASE

A committee formed by the state vidhan sabha had discovered various lapses in the centralised purchase of school mats for primary schools during January-April 1968, when there was a SVD government in the state.

The Bhawe Commission enquired into these charges too, and concluded that irregularities were committed by officers and a deliberate attempt was made to give concessions to a particular person. However, it exonerated the education minister and his deputy in the SVD government. Only the officers were to be blamed.

As a sequel to these developments, one may note that as soon as the report was placed on the table of the House, a Congress member, Dhirendranath Sharma demanded that a similar enquiry be made in respect of five other alleged scandals, relating to the state textile corporation, sal seed and muck-dump deals during the regime of P C Sethi. So one can look forward to more investigations and, almost inevitably, more exonerations.

#### LAW OF THE SEA

### Pre-emptive Legislation

Ashok Ogra

IN the absence of any appropriate international legal framework and a machinery for the exploitation of sea wealth, some of the advanced countries have been taking advantage of it by rushing to exploit the resources of the oceans in unseemly haste. The passing of the Territorial Waters, Continental Shelf, Exclusive Economic Zone and other Maritime Zones Bill by Parliament is thus a significant step towards curbing the unchartered freedom of these advanced countries to exploit the riches of this environment. The Bill extends Indian Territorial waters to 12 nautical miles measured from the appropriate baselines, extends the contiguous zone upto 24 miles and proclaims India's sovereign rights over the resources of its exclusive economic zone to 200 nautical miles. The Bill also seeks to specify the limits of historic waters over which India had sovereignty such as those in the Palk Bay and the Gulf of Mannar between India and Sri Lanka.

Since 1958, when the first United Nations Conference on Law of Sea (UNCOLS-I) took place, there has been considerable improvement in Sea Technology, rendering the old law obsolescent. Some of the assumptions on which the old law was based have proved incorrect, like the belief that the sea resources — both living or non-living — are inexhaustible. Again the problem of sea pollution had not arisen then and the military significance of

the sea was not as great as it is today. Except adopting four conventions relating to territorial sea and the contiguous zone, the high seas, fishing and the continental shelf, the UNCOLS-I, failed to precisely define the limits of national jurisdiction of territorial sea, fisheries zone and the continental shelf. The UNCOLS-II held in 1960, also met the same fate. To end this uncertainty and evolve an international machinery for regulation of economic and military use of the sea, UNCOLS-III held its inaugural session in New York in 1973; besides the inaugural one, the conference so far has held three sessions — at Caracas in June-August, 1974, Geneva in March-May 1975 and New York in March-May 1976. The fourth session of the conference that started on August 2 is expected to conclude on September 17.

The conference has before it four important texts. The first relates to the creation of an international sea-bed authority, with headquarters in Jamaica, to exploit the resources of the international sea-bed, either by itself or in contract with other states and corporations; the second deals with the extension of the territorial sea limit upto 12 miles, a contiguous zone upto 24 miles from shore, a 200-mile exclusive economic zone and a continental shelf which can extend beyond the economic zone; the third allows coastal states to limit

foreign scientific research in their exclusive economic zones; and the fourth provides for compulsory settlement of disputes. But because of the conflicting interests between the developed and the developing countries the conference is expected to yield no significant solution. The main differences between them relate to the mechanism that would regulate the exploration and exploitation of sea wealth. The developed countries are strongly opposed to any restriction on their freedom to explore and exploit the resources. On the other hand, the developing countries are in favour of some strong machinery with powers to explore and exploit the sea-bed resources. This, according to them, is the best way to preserve the common heritage for the benefit of everybody and exploit its resources in the interests of all mankind.

But despite these differences being yet unresolved, the advanced countries have been feverishly exploiting the resources of the seas, with no consideration for the needs of the poor countries. This is clear from the legislative and other measures that these countries have taken in recent years. It was in view of it that India decided not to wait for the Law of the Sea Conference for a solution, but go ahead in strengthening its hold over its sea wealth. After all the United Nations has been wrestling with the problem for over five years now, and the solution is nowhere in sight. The Indian initiative may be said to reflect the deep fears of the developing countries that by the time some agreement is reached on the legal question, they might be faced with the situation where a large part of the sea had already been exploited and appropriated by those who have the capacity to do it.

That the Bill was not moved earlier shows that India has been very late in recognising the economic potentials of sea resources. The first successful drilling which has promised good quality crude oil was done only in February 1974. The Bill proclaiming India's sovereignty over the exclusive economic zone in the ocean and entitlement to exercise jurisdiction in respect of other matters, would greatly help India to step up her drilling operations and raise production substantially; at present India produces some 8 million tonnes of petroleum, whereas its consumption needs exceed 24 million tonnes. Indian fishing too will be benefited by these measures.

Similarly, the continental shelf that



has been defined as comprising of the sea-bed and sub-soil of submarine areas that extend beyond the limits of territorial waters, would contribute to economic development through exploitation of marine and submarine minerals and

resources. The bill would further strengthen the freedom of navigation which is being threatened by new military devices and technologies like mine defence, torpedo defence and defensive acoustic warfare.

mercifully based on plain and simple observations. Thus the causes for the persistent and continuous unrest in Thanjavur are the communists and their unions.

As though to infuse more life into the study, a battle royal is waged between two schools of thought, one — M E Abel, F Frankel and the Union Home Ministry, among others — holding that the green revolution widens the rich-poor gap in villages and so accentuates social tension and the other — Alexander, Betcille and Oommen — holding a view best expressed in Alexander's own words: "... under the influence of various modernising forces such as education, mass media, and the activities of the radically oriented-political parties, the conservative ideology institutionalised in the social system is being replaced by a radical ideology among the lower strata of the society ... On the other hand, a similar change in ideology and norms has not become perceptible among the land-owning cultivators and other privileged sections ... Consequently, the two groups are not able to appreciate each other's point of view, which made smooth interaction between them difficult..." Some old fashioned adherents to ideology might have a simpler expression for this — the rising class consciousness of the labourers — but such descriptions are probably too value-laden for such neutral treatises like the one under review.

Alexander seeks to demolish the former theory with: "If increase in production caused by the IADP and other agricultural development programmes was the genesis of the feeling of deprivation by the labourers as implied in this hypothesis, then (1) agrarian tension should manifest in all areas where the agricultural development programmes have been in operation, (2) the manifestation of agrarian unrest should be posterior and not anterior to the introduction of agricultural development programmes ..." Not content with this he goes on: "(3) there should be a correlation between labourers' feeling of deprivation and their perception of the increase in production", the establishment of the negative of which becomes the burden of this book.

In this battle royal, it is difficult to remain silent when Abel, Frankel and others — not to speak of the Home Ministry — are hit below the belt and summarily dismissed. After very conveniently restricting the 'Green Revolution theory' into this straightjacket —

## REVIEWS

### Agrarian Tension: How Not to Study It

**Agrarian Tension in Thanjavur** by K C Alexander; National Institute of Community Development, Hyderabad, 1975; pp 187; Rs 45.

OURS is a nation of villages ruled by cities. Not only our rulers, but our scholars as well, are city-dwellers equipped with tools sharpened in the cities of the world — the industrialised West — seeking to dissect and analyse the village society through questionnaires, likert scaling, factor analysis and IBM Centroid solutions. Add to this the very special propensity of certain Indian academics to hypothesise the very obvious. You then have 'Agrarian Tension in Thanjavur' described as "a sociological study of the causes for the persistent and continuous agrarian unrest in Thanjavur".

The provocation for this study is declared to be the "eruption of violence" and the "tragedy that occurred at Kilvenmani (Thanjavur) in December 1968 when 42 persons lost their lives" — a reference to the burning alive of 42 Harijan women, children and old men belonging to agricultural labour families and members of the CPI-M organised union, by the landowners. The study, conducted in late 1971, used an interview schedule on sample population drawn from two taluks in East Thanjavur, one characterised by high level of "agrarian unrest" and the other by low level — Mannargudi and Mayuram, respectively. "The assumption was that since the two areas with differing levels of agrarian unrest could have more or less similar socio-economic variables, the cause of unrest could be attributed to those variables on which the two differed." The hypotheses guiding the study — which, the author says, he set out to neither prove nor disprove — are stated in clinical terms:

- (1) Those labourers who perceive greater increase in production are likely to feel greater deprivation.
- (2) Those labourers who subscribe to egalitarian norms are likely to feel more deprived.

(3) Labourers with radical ideological orientation are likely to hold egalitarian distributive and relational norms.

(4) Agrarian unrest is likely to be acute in an area where agricultural labourers and other weaker sections of the society have organisations to express their discontent.

Thanjavur has traditionally been a land of extreme inequalities. Its temples and Hindu monasteries, untouched by any ceiling law, along with individual landlords and rich peasants, remain the chief prop of feudal oppression. In sharp contrast to the affluence of these stands the grinding poverty of the landless and the small cultivators. Thanjavur has the largest percentage of landless and Harijans in the state. The sample population in the study shows that more than 60 per cent of agricultural families hold no land at all or less than one acre, either as owners or as tenants. The total assets of the majority of the population fall below Rs 1,000 and more than 70 per cent have a monthly income of less than Rs 100. It also turns out that in the rice bowl of Tamil Nadu, the labourers find no employment for an average of 12 days in a month. And this in a triple crop area!

After countless Chi-Square statistics, Mann-Whitney U-Tests and Kruskal-Wallis one way analyses, it turns out in the study under review, that Mayuram, with its low unrest reputation, has higher "tension", i.e. feeling of deprivation on the part of labourers, compared to Mannargudi! Then how does one account for the fact that Mannargudi has had such a violent history while Mayuram has been relatively peaceful? The author finally comes to the conclusion that this must be due to the fact that the communists are a much stronger force in Mannargudi than in Mayuram — a finding that is



"the operational statement of this hypothesis was that the feeling of deprivation of the labourers was likely to be related to their perception of increase in agricultural production, and, therefore, labourers who perceived greater increase in production were likely to feel deprived about the distribution of the increased production" — the author goes on to establish a mysterious variable called "perception of increased output". In this book of 128 tables, there is not a single table to show how a measure of this variable was arrived at. One is led to presume that three statements — farmers became richer due to HYV paddy, due to multiple cropping and due to higher prices — with which 100 per cent of Mannargudi labourers and almost 100 per cent Mayuram labourers agreed, are taken to represent this "perception of increased output". This is then shown to draw blank in the Chi-Square comparisons against arbitrarily defined "indices of tension" — perception of the main beneficiaries of increased production, feelings of satisfaction and dissatisfaction about the distribution of the increased production and opinion about the adequacy or otherwise of the prevailing wage rate. One would have thought that these perceptions in which the cultivators and labourers showed distinct differences, better describe — and bear out — the green revolution theorists, who, if one understands them correctly, are seen to say: "The green revolution has resulted in an uneven distribution of its fruits and it is the the perception of this *distributional difference* on the part of labourers — and not merely the perception of increased output — that leads to conflict."

But no, says Alexander. He would insist on nailing them to the cross of increased agricultural production only and would go on to find a positive association between the "distributional norms" held by labourers and their "indices of tension", which according to him proves his own theory. A good conduct certificate is issued to the green revolution: "Put in different words, the agrarian unrest was not caused by the green revolution." If the mere existence of the rich-poor gap or even its accentuation as in the case of the green revolution is enough to create tension and conflict, this land of ours must have been convulsed by a thousand revolutions by now. That the confluence of both the objective and the subjective factors — the latter being the existence of an organisation capable of channelling

mass discontent into united action — is necessary for social change in a historically observed reality that every revolutionary is aware of — and Alexander researches to find out.

Some of the tabulations published could have been of greater use as sources of information if only the classification of the sample had been more purposive. In the part of a district holding nearly twice as many agricultural labourers as cultivators (according to the 1971 census) the sample drawn contains less labourers than cultivators. This is due to the introduction of an untenable middle category called labourer-cum-cultivator, which group the author keeps independent or merges with cultivators or with labourers as it suits his convenience, in the various tabulations. The Census definition of labourer could at least have been adopted to re-categorise this intermediate group.

Added to this, the grouping together of CPI and CPI(M) (because of the alleged similarity in their ideology and programmes and notwithstanding their often differing stands on wage and other issues in Thanjavur); the assumption that the sample population truly reflects the political affiliation of the whole taluk; the repeated assertions that the radicalism of labourers is associated with their illiteracy (which even as the author finds, is a reflection of their low economic status); the inadequate discrimination between small and big land holders; the monotonous repetition of tabulated figures in the text; the frequent presence of the printer's devil; the basic error in Table III.5; the glossing over of the discordant Mannargudi results in Table IV.12; the incompatibility between the percentage shown as landless in Table II.13 — less than 10 per cent — and the percentage of labourers in the sample — these are some of the aspects that detract from the image of a study conducted by the National Institute of Community Development, which is, in its own words, the premier organisation of research and training in social change in rural areas".

To inflict a schedule with more than 100 questions — several of them long-winded statements — on a largely illiterate village population, to expect them to understand the nuances between ought and is, to ignore the natural bias for appearing to be good, especially when faced with familiar sounding slogans, to gloss over the tremendous communication gap, the value reference, the language, the concepts, to neglect the importance of patient fieldwork in

understanding rural socio-political milieu — all these indicate a certain naivete and lack of appreciation of methodological pitfalls. This naivete is seen in asking the agricultural labourers what they thought their monthly income should be, whether their sons or grandsons should be educated to BA, BSc level or MA, MSc level; in ignoring wildly fluctuating and obviously unreliable responses as in Table IV.10 in missing out public meetings, and study classes conducted by the Communist parties in the scale for communication media; above all in the understanding of the role of the police in a class society. The author says in the introduction: "... the resulting tension in the past had often led to an outbreak of violence between the two groups. The police and other public authorities intercede on such occasions and, sometimes, succeed in settling disputes. But, occasionally, some of these conflicts go out of control and end in tragedies like the one that occurred at Kilvenmani where 42 persons lost their lives." Could it be that the author is unaware of the several letters written in the weeks prior to the Kilvenmani massacre by the President of the Agricultural Labourers Association in Thanjavur to the IG of Police and the Home Secretary, drawing their attention to police partiality on the side of the landlords in the wage dispute and the consequent deteriorating situation. That the bureaucracy almost always sides with the landed gentry is so widely accepted now that even "objective" social surveys need not be wary of admitting it. Again in Table IV.4, the author presumes disagreement with the statement, "Police should be banned from interfering in the conflicts between workers and farmers" to be an indication of the radical ideological orientation of the respondent and analyses the information accordingly!

The message of the elaborate survey can be stated simply: "The Green Revolution does not cause agrarian tension; nor do 'feelings of deprivation' on the part of labourers. But the presence of communists does." To be fair to the author, one must add that he does not recommend keeping the communists out of the area as a cure for tension. In fact, he grudgingly admits that "even though agrarian unrest might at first appear to be an unwelcome phenomenon, from the point of view of the emergence of an egalitarian society its consequences on the social structure have not been *altogether dysfunctional*". (italics added.) Earlier he points out



that it is only in Mannargudi with a high rate of tension that improvement in the status of Harijans has occurred. And it is through "agrarian struggles", he finds, that the labourers were able to "effect all-round improvement in their status". "Besides, the labourers were able to achieve fixation of the hours of work, restriction in the employment of immigrant labourers, abolition of many inhuman practices like whipping and making them drink cow-dung solution." What the law by itself could not do was accomplished by the struggles organised by the unions with a communist ideology. Lest the latter should be given undue credit, the author adds: "This, however, does not mean that agricultural labourers can be organised only by the Communist party. Yet the fact remains that other political parties which are popular in Mayuram have not taken pains to do so."

"What are the implications of the above findings for policy formulation and management of agrarian unrest?"

## Indo-Soviet Relations

Vinod K Mehta

**Foundations of Indo-Soviet Relations: A Study of Non-Official Attitudes and Contacts, 1917-1947** by Nirmala Joshi; Radiant Publishers, New Delhi, 1975; pp 204 + xiii; Rs 30.

THE Russian Revolution of 1917 kindled the imagination of many people in India who were struggling against the British rule. Many dreamt of overthrowing the colonial rule by armed revolution and establishing a socialist society in India. The revolution in Russia not only helped intensify the liberation struggle but also goaded many Indians to establish contacts with the Bolsheviks against heavy odds. These unofficial contacts have now become foundations upon which the present Indo-Soviet relations are built.

Nirmala Joshi has gathered her material from the National Archives of India and the USSR to give us an account of how the Indian freedom fighters were able to establish contacts with the Bolshevik leaders, the emergence of parties and associations which proclaimed by Marxist ideas, the formation of mutual attitudes between India and the Soviet leaders. She also examines the writings of Indians on Soviet Union and *vice versa*.

For analytical purposes the author has subdivided the period 1917-1947 into four phases: 1917-1926; 1927-

Alexander asks. Perhaps it is too naive to expect him to recommend strengthening of labour unions and sharpening of struggles although they have, in his own words "contributed to the enhancement of the status of the underdog and the emergence of egalitarian social relations". "...there is need on the part of those in authority to view the activities of the agricultural labourers and other members of the weaker sections of the society to organise themselves and endeavour for the redressal of their grievances with understanding and sympathy, rather than treat them as challenges to the law and order machinery." With this exhortation, Alexander is done.

One hears a lot on the need for appropriate technology and appropriate scientific research from establishment scientists of this country. One wishes that they will some day turn their attention to appropriate social science research as well. The Chinese certainly have a point when they ask their scholars to go to work in the villages.

1939; 1939-1945 and 1945-1947. The first phase considers the initial response of Indian people to the Bolshevik Revolution; the second phase describes the growth of friendly feelings between Indian and Russian leaders; the third phase considers the dawn of a new realism in these relations in the wake of Stalinist consolidation; and in the fourth phase both the countries are looking forward to establishing state-to-state relations.

There were two chief constraints on unofficial contacts between India and the Soviet Union. One, "a major factor which seriously affected the Indian perception of the Soviet Union was that very little authentic information on the developments in that country was available. Being a colonial country, India was largely dependent upon Britain for information on Soviet Russia. The British Government, fearing an adverse impact of the Revolution on its rule in India, severely censored and distorted all information concerning Russia." Secondly "Soviet Russia was not well posted with information on India's socio-economic conditions and political deve-

lopments. Soviet policy towards India was hence based on certain Marxist theoretical generalisations on colonialism rather than on empirical evidence" (p 180). Describing the efforts of Indian freedom fighters and others to establish contacts with the Bolshevik leaders, Nirmala Joshi reveals that about sixty thousand Indians, mostly traders, who were living in Bokhara and Samarkand at the time of Revolution, formed a committee and expressed their solidarity with the Bolshevik Government. A few people even undertook to propagate Bolshevik ideas among the Indians in Central Asia. Indians in exile like Virendranath Chattopadhyaya, Raja Mahendra Pratap, M N Roy and others, including the leaders of the Ghaddar Party, were able to establish contacts with the Bolsheviks and sought their help in liberating India. M N Roy even became a member of the Comintern. A number of associations like Anushilan Samiti, Hindustan Republican Association, Indian Nationalist Party, Hindustan Socialist Republican Association, Congress Socialist Party, etc, which professed Bolshevik ideas also sprang up in the wake of the October Revolution and did much to spread socialistic ideas in India.

The book describes the attitude of the Indian National Congress towards the Russian Revolution (particularly those of Gandhi and Nehru), its impact upon the Congress party itself, the attitude of the Soviet leaders towards the Indian National Congress during pre-Stalinist, Stalinist periods. The book also underlines the role of Nehru in the shaping of Indo-Soviet relations. Nehru was of course no communist; but he fully supported the October Revolution and considered the "Soviet system as more democratic than the so-called democracies of the West" (p 90). An aspect of Soviet Union which had a lasting impact upon Nehru was the remarkable progress made by Central Asia under Soviet rule; the Soviet system of education and the idea of planning as a way to rapid economic development also impressed him deeply. Though Nehru lost some of his initial enthusiasm for the Soviet Union during the period of Stalinist consolidation, he never wavered in his belief that India must have friendly relations with the Soviet Union, and that the Soviet Union was justified in certain of its actions (like Russo-German pact), in the context of the existent international situation. In a sense Nehru emerges in Nirmala Joshi's book as the architect of present friendly Indo-Soviet relations.



Announcement regarding issue of Rs. 15 crores 6 $\frac{1}{4}$ % debentures (1992)  
 applied for issue and allotment of further debentures of Rs. 1.50 crores and guaran

This is not a prospectus. Persons interested in details may obtain copies o

# THE INDUSTRIAL CREDIT AND INVEST

(Incorporated on January 5, 1955)

Registered Office : 163, Ba

Regional Offices : 20, Old Court House Street, Calcutta 700 001. • 1, Cenotaph Road

## EXISTING AND PROPOSED ACTIVITIES :

The Company was incorporated on January 5, 1955 with the object of carrying on the business of assisting industrial enterprises in India, more particularly described in its Memorandum of Association.

The Debentures are being issued for the purpose of augmenting the resources of the Company to meet the demands of industry for financial assistance and to meet the other needs of the Company.

## BOARD OF DIRECTORS :

H. T. Parekh (Chairman)  
 J. S. Raj (Vice-Chairman)  
 K. K. Birla  
 D. P. Goenka  
 N. A. Palkhivala  
 L. J. Mulkern  
 N. M. Wagle  
 M. V. Sohoni  
 R. V. Raman  
 M. G. Balasubramanian (Government Director)  
 M. Sen Sarma  
 M. D. McWilliam  
 M. V. Arunachalam  
 S. S. Mehta, (Managing Director)  
 Phiroze B. Medhora (Joint Managing Director,  
 On deputation to the International Bank for  
 Reconstruction & Development,  
 Washington D.C., U.S.A.)  
 J. M. Ahrens (Alternate Director to L. J. Mulkern)  
 N. H. Green (Alternate Director to  
 M.D. McWilliam)

## PRESENT ISSUE :

30,000 Debentures (1992) of Rs. 5,000 each at 97.50% (i.e. Rs. 4,875 each) with a right to retain excess subscription money up to 10% of the Issue to be applied for issue and allotment of further 3,000 debentures.

Interest at the rate of 6 $\frac{1}{4}$  per cent per annum (subject to deduction of tax at source) will be payable half-yearly on October 15 and April 15 except that interest will accrue on the Debentures allotted from the date of receipt of the application, and accordingly, the initial proportionate payment of interest will be made on April 15, 1977.

## SHARE CAPITAL :

(as on June 30, 1976)

	Rs.	Rs.
<b>Authorised:</b>		
15,00,000 Equity Shares of Rs. 100 each		15,00,00,000
10,00,000 Unclassified Shares of Rs. 100 each		10,00,00,000
<u>25,00,000</u>		<u>25,00,00,000</u>

## Issued and Subscribed:

15,00,000 Equity Shares of Rs. 100 each	
issued for payment in cash	<u>15,00,00,000</u>

## Paid-up:

15,00,000 Equity Shares of Rs. 100 each	15,00,00,000
Less: Calls in arrears	<u>8,300</u>

14,99,91,700

15,00,00,000



a right to retain excess subscription up to 10% of the Issue to be  
 repayment of principal and payment of interest by the Government of India.

from the Registered Office or the Regional Offices of the Company.

## T CORPORATION OF INDIA LIMITED

Companies Act VII of 1913)

on, Bombay 400 020.

8. • Hindustan Times House, 18-20, Kasturba Gandhi Marg, New Delhi-110 001.

### ERNMENT GUARANTEE :

Debentures, now being issued, are guaranteed by the Government of India as to the repayment of the principal and the  
 of the interest thereon at 6½%. The Debentures will not, however, entail any charge on the assets or the  
 taking of the Company.

Debentures will be considered as approved security under the provisions of the Indian Trusts Act 1882, the  
 Finance Act 1938 and the Banking Regulation Act 1949.

Debentures shall be redeemed at par on October 15, 1992.

Company shall have the right to purchase Debentures from the open market and the same can be reissued during  
 expired period of the Debentures.

Principal moneys of the Debentures to be issued hereunder and the interest accrued thereon shall rank for payment,  
 and out of the funds of the Company:

After all the foreign currency loans with interest thereon, both present and future, except the 8% Bonds (1977-88)  
 for Swiss Francs 8 million;

*pari passu* with all the rupee term loans, both present and future, and the Debenture issues previously made with interest  
 thereon and the Debentures to be issued hereafter with interest thereon (except the interest free special advance of  
 Rs. 400 lacs from the Government of India, which ranks after the share capital of the Company) as also the said Bond  
 issue of Swiss Francs 8 million referred to above;

payment will be without affecting the rights of the holders of the 8% Bonds (1977-88) for Swiss Francs 8 million;  
 holders of Rs. 13.75 crores 6½% (1990) Debentures, the holders of Rs. 13.75 crores 6½% (1991) Debentures, and the  
 holders of the present issue of Debentures to take recourse to the Guarantee of the Government of India issued in their favour.

At any meeting of the debenture holders, each voter shall on a show of hands be entitled to one vote only and at a poll  
 shall be entitled to one vote in respect of every principal sum of Rs. 5,000 of the Debenture in respect of which he is  
 entitled to vote.

In the event of over-subscription, allotment to shareholders of the Company who apply for Debentures will be considered  
 on a preferential basis to meet the requirements of the listing agreement with the Stock Exchange, Bombay.

### ES OF THE OPENING AND CLOSING OF THE SUBSCRIPTION LIST :

Subscription List will open at the commencement of banking hours on Thursday, September 23, 1976 and will close at the  
 end of banking hours on Tuesday, September 28, 1976 or earlier at the discretion of the Directors but not earlier than the  
 end of banking hours on Saturday, September 25, 1976.

### OSPECTUS AND APPLICATION FORMS :

Application must be for one or more Debentures and should be forwarded to the Registered Office of the Company together  
 with the payment at the rate of 97.50% of the nominal value of the Debenture i.e. Rs. 4,875 per Debenture. However, for the  
 convenience, applications together with the necessary payment would be accepted by the Central Bank of India at  
 its main offices at Bombay, Bangalore, Ahmedabad, Calcutta, Hyderabad, Indore, Madras and New Delhi.

Application Forms along with copies of the Prospectus can be obtained from the Registered Office and the Regional  
 Offices of the Company.



# Effective Cost of Primary Education in India

P R Gopinathan Nair

*The measurement of educational costs is an intricate problem. Since costs are met not only by public agencies, but by private institutions and even households, calculations of costs made solely on the basis of government expenditure will not yield reliable results. There are also drop out and stagnation factors that affect the 'effective cost' per unit of output.*

*In this paper, an attempt is made to estimate the rates of drop out and stagnation in various Indian states at the elementary stage of education. On the basis of these calculations, a physical index of 'effective cost' is constructed which, it is hoped, is capable of capturing the total cost of schooling per unit of output to society.*

*An analysis of the physical index of 'effective cost' reveals that the effective costs of primary education are lowest in Kerala, and the states in the north-western parts of the country. Uttar Pradesh, Bihar, Nagaland, Manipur, Karnataka, Orissa and Andhra Pradesh are among the states with the highest costs of education per functionally literate person.*

THE measurement of educational costs is an intricate problem. Educational planners and economists have discussed the indices for measuring the costs of education at various levels.<sup>1</sup> Since costs are met not only by public agencies, but by private institutions and households also, calculations of costs made on the basis of government expenditure alone will not yield reliable results. Moreover, drop out and stagnation are factors that affect the 'effective cost' per unit of output with given levels of education. In spite of a large number of studies made on the measurement of drop out and stagnation, the magnitude of these phenomena is unknown for the entire educational system or any of its sub-systems in any of the states in India. In this paper an attempt is made to estimate the rates of drop out and stagnation in the various states at the elementary stage of education. On the basis of these calculations, a physical index of 'effective cost' is constructed which, it is hoped, is capable of capturing the total cost to society for schooling per unit of output. Separate indices of cost are constructed for (a) one functionally literate person,<sup>2</sup> and (b) one person with seven years of completed schooling. In our view, this physical index of cost is invariant to inter-state differences in educational facilities like buildings and equipment, qualifications, experience and salaries of teachers, teacher-pupil ratios and administration expenses. If the money measure of the total cost per student incurred in each state is known the physical index can be used to compare the 'effective money cost' of education in the different states. For the construction of the physical index of cost, we have first estimated the

magnitude of drop out and of stagnation in each state. For this purpose a simple Markov chain model has been used.

*The Markov Chain Model:* The theory of finite state absorbing Markov Chains is an easily applicable tool for analysing inflows and outflows of an educational system.<sup>3</sup> For this purpose we begin with a transition probability matrix.

$$(1) \quad P = (p_{ij}) \quad (i, j) = 1, 2 \dots 11$$

where  $p_{ij}$  is the probability that a student in the  $i^{\text{th}}$  stage of the educational system moves next year into the  $j^{\text{th}}$  stage; the first seven stages are standards 1 to 7 respectively and the last stage represents the state of a student leaving the system from any of the 7 standards. Thus for example,  $p_{2, 8}$  gives the probability of a student who is in standard 2 in a given year dropping out of the educational system the next year. We make the following assumptions about  $P$ . From any given standard 1 to 6, a transition next year is possible only to that standard (in case of failure) or the next higher standard (in case of promotion) or to stage 8 (in case of drop out); no other transition is possible. Our final assumption is that  $P_{8, 8} = 1$  which means that anyone who leaves the system does not enter it again. The matrix  $P$ , thus taking a very simple form with a large number of zeros appearing in it makes the computations simple. The matrix  $P$  is assumed to be constant over time: one of the implications of this assumption is that the probability of promotion (or stagnation or drop out) from a given standard is indepen-

dent of the number of years a person has already spent in that standard.

With these assumptions it is easy to work out the disposition of any given group of students  $n$  years hence. Thus if,

$P = (p_1, p_2 \dots p_8)$  is the vector of proportions of a given group in the initial year,  $n$  years hence the proportions will change to  $q$  given by

$$(2) \quad q = p P^{n-1}$$

If we start with an initial group entirely in standard 1 we may set for  $P$  the vector  $(1, 0, 0, 0, \dots, 0)$  in equation (2).

Since the stage 8 represents an absorbing state the theory can also be used for evaluating the matrix.

$$(3) \quad N = \langle E(n_{ij}) \rangle$$

Where  $E(n_{ij})$  gives the expected (or average) number of years a student entering the system into the  $i^{\text{th}}$  stage spends in the  $j^{\text{th}}$  stage of the system excluding the absorbing state, i.e., 8.

Hence  $\sum_{j=1}^n r_{ij} = N_i$ , gives the average number of years a student entering the  $i^{\text{th}}$  stage spends in the entire system before leaving it finally.

In the theory of Markov Chains it is well known that

$$(4) \quad N = (I - A)^{-1}$$

Where  $A$  is obtained from  $P$  by suppressing the last row and the last column (i.e., row and column corresponding to the absorbing state). It is obvious that  $N$  can be used for computing aggregate statistics like stagna-



TABLE 1A: STAGNATION INDEX IN ELEMENTARY SCHOOL: BOYS

(Per Cent)

State	Ranking According to Total Cost per Functionally Literate Person (See Table: 3)	Class						
		1	2	3	4	5	6	7
Delhi	1	.091	.124	.093	.087	.092	.108	.160
Punjab	2	.112	.068	.052	.057	.060	.067	.078
Haryana	3	.165	.126	.101	.089	.094	.109	.098
Himachal Pradesh	4	.195	.165	.130	.138	.103	.128	.122
Jammu and Kashmir	5	.004	.007	.009	.011	.013	.019	.021
Kerala	6	.326	.330	.295	.313	.338	.313	.346
Maharashtra	7	.372	.245	.220	.199	.136	.109	.063
Tamil Nadu	8	.235	.225	.215	.222	.229	.212	.206
Rajasthan	9	.187	.123	.172	.160	.108	.150	.117
Madhya Pradesh	10	.402	.221	.179	.142	.089	.130	.103
Assam	11	.454	.210	.063	.168	.129	.132	.164
Gujarat	12	.655	.283	.197	.183	.161	.120	.070
Uttar Pradesh	13	.215	.184	.163	.165	.144	.153	.172
Karnataka	14	.494	.429	.343	.342	.259	.266	.273
Nagaland	15	.562	.585	.511	.500	.345	.310	.579
Andhra Pradesh	16	.430	.406	.320	.268	.261	.171	.138
West Bengal	17	.638	.374	.386	.301	.241	.198	.219
Bihar	18	.359	.142	.153	.099	.061	.113	.165
Orissa	19	.494	.331	.301	.264	.189	.234	.243
Manipur	20	.664	.174	.043	.048	.088	.091	.073
INDIA		.305	.241	.217	.196	.164	.159	.158

TABLE 1B: STAGNATION INDEX IN ELEMENTARY SCHOOL: GIRLS

Delhi	1	.097	.107	.097	.088	.096	.148	.141
Punjab	2	.103	.061	.048	.051	.054	.078	.081
Haryana	3	.180	.107	.086	.097	.113	.108	.109
Himachal Pradesh	4	.173	.161	.129	.130	.099	.132	.159
Jammu and Kashmir	5	.003	.010	.013	.015	.017	.020	.023
Kerala	6	.363	.208	.272	.288	.305	.340	.324
Maharashtra	7	.365	.261	.215	.196	.135	.103	.063
Tamil Nadu	8	.202	.223	.253	.220	.223	.215	.210
Rajasthan	9	.099	.295	.198	.182	.107	.101	.077
Madhya Pradesh	10	.348	.212	.191	.142	.093	.132	.115
Assam	11	.458	.196	.200	.157	.132	.144	.178
Gujarat	12	.660	.259	.171	.165	.141	.111	.079
Uttar Pradesh	13	.195	.205	.201	.198	.193	.180	.184
Karnataka	14	.489	.355	.312	.286	.180	.175	.172
Nagaland	15	.859	.697	.586	.714	.571	.571	1.000
Andhra Pradesh	16	.445	.395	.353	.306	.338	.223	.218
West Bengal	17	.634	.385	.366	.294	.234	.235	.226
Bihar	18	.307	.191	.151	.168	.150	.157	.346
Orissa	19	.388	.292	.304	.307	.166	.199	.056
Manipur	20	.578	.450	.098	.067	.026	.065	.034
INDIA		.335	.256	.235	.214	.187	.178	.173

TABLE 1C: STAGNATION INDEX IN ELEMENTARY SCHOOL: BOYS AND GIRLS (COMBINED)

Delhi	1	.094	.116	.095	.088	.094	.124	.152
Punjab	2	.108	.065	.050	.054	.057	.070	.079
Haryana	3	.170	.120	.097	.091	.099	.109	.100
Himachal Pradesh	4	.187	.163	.130	.135	.102	.129	.130
Jammu and Kashmir	5	.004	.008	.010	.012	.014	.019	.022
Kerala	6	.343	.315	.284	.300	.322	.325	.336
Maharashtra	7	.344	.252	.218	.198	.136	.107	.063
Tamil Nadu	8	.220	.224	.230	.221	.227	.213	.208
Rajasthan	9	.165	.159	.178	.165	.107	.141	.110
Madhya Pradesh	10	.386	.218	.182	.142	.090	.130	.106
Assam	11	.456	.204	.191	.164	.130	.136	.169
Gujarat	12	.657	.275	.138	.176	.154	.117	.073
Uttar Pradesh	13	.207	.192	.175	.174	.158	.158	.174
Karnataka	14	.491	.397	.330	.319	.230	.234	.240
Nagaland	15	.670	.628	.539	.576	.419	.395	.714
Andhra Pradesh	16	.436	.401	.333	.282	.289	.186	.159
West Bengal	17	.637	.378	.379	.298	.239	.211	.222
Bihar	18	.344	.155	.152	.113	.078	.120	.190
Orissa	19	.452	.317	.302	.276	.183	.226	.201
Manipur	20	.628	.268	.062	.054	.065	.081	.060
INDIA		.341	.246	.223	.202	.171	.165	.162



TABLE 2A: DROP OUT RATES IN ELEMENTARY SCHOOL: BOYS

(Per Cent)

State	Ranking According to Total Cost Per Functionally Literate Person (See Table 3)	Class					
		1	2	3	4	5	6
Delhi	1	18.7	3.2	13.3	4.5	2.4	7.3
Punjab	2	20.1	6.0	13.4	12.2	5.9	5.7
Haryana	3	21.1	10.0	7.8	6.8	0.9	6.0
Himachal Pradesh	4	21.6	7.4	4.8	8.3	10.9	13.2
Jammu and Kashmir	5	23.1	24.4	16.1	10.2	9.6	9.4
Kerala	6	8.1	4.1	8.3	14.3	11.6	11.5
Maharashtra	7	24.6	12.5	8.4	11.5	13.6	12.8
Tamil Nadu	8	25.9	13.8	14.5	13.2	15.6	20.4
Rajasthan	9	49.1	19.5	11.3	7.0	11.8	13.0
Madhya Pradesh	10	33.1	13.5	14.6	12.7	19.0	10.7
Assam	11	45.6	10.3	7.7	11.8	14.8	12.5
Gujarat	12	28.7	14.7	10.9	14.6	16.5	13.1
Uttar Pradesh	13	44.3	22.2	14.5	13.5	7.8	9.7
Karnataka	14	25.4	18.4	16.8	22.1	12.5	0.4
Nagaland	15	42.9	5.7	8.5	10.5	3.4	24.1
Andhra Pradesh	16	39.5	13.1	18.4	13.1	12.5	19.8
West Bengal	17	32.6	14.9	18.8	4.7	3.1	14.0
Bihar	18	43.2	23.7	21.2	13.0	8.0	14.2
Orissa	19	31.7	21.9	22.9	15.3	18.4	8.6
Manipur	20	53.8	38.1	9.6	15.5	16.2	—
INDIA		35.0	16.3	14.3	12.5	11.3	12.3

TABLE 2B: DROP OUT RATES IN ELEMENTARY SCHOOL: GIRLS

Delhi	1	15.9	0.3	6.2	12.6	1.2	2.7
Punjab	2	12.8	6.2	14.1	17.4	29.1	7.5
Haryana	3	22.2	10.9	8.9	12.3	20.6	14.3
Himachal Pradesh	4	25.7	10.8	13.8	19.2	39.5	25.3
Jammu and Kashmir	5	32.4	14.5	5.1	5.1	0.8	4.0
Kerala	6	3.4	2.3	5.5	21.4	19.4	8.8
Maharashtra	7	32.3	17.2	14.7	18.6	16.5	16.0
Tamil Nadu	8	30.9	19.1	16.2	19.0	29.6	20.8
Rajasthan	9	54.0	3.6	7.3	11.4	22.9	15.2
Madhya Pradesh	10	38.8	20.7	14.8	15.4	23.6	15.2
Assam	11	46.2	11.9	7.4	14.8	21.7	5.7
Gujarat	12	31.9	13.6	12.7	16.4	17.7	16.5
Uttar Pradesh	13	49.4	31.5	19.1	14.9	47.5	12.5
Karnataka	14	34.4	23.6	22.6	33.4	16.9	8.5
Nagaland	15	35.9	—	13.8	9.5	—	21.4
Andhra Pradesh	16	37.4	18.0	24.0	21.6	35.8	20.0
West Bengal	17	40.2	8.4	21.4	7.9	16.8	10.2
Bihar	18	48.8	24.6	36.7	17.4	17.6	16.7
Orissa	19	37.9	26.4	36.5	26.1	35.2	9.3
Manipur	20	62.7	37.5	9.8	11.1	25.6	6.5
INDIA		38.0	18.7	17.6	18.1	25.6	13.6

TABLE 2C: DROP OUT RATES IN ELEMENTARY SCHOOL: BOYS AND GIRLS (COMBINED)

Delhi	1	17.5	1.9	10.2	7.9	1.9	5.5
Punjab	2	17.2	6.1	13.7	14.3	14.8	6.3
Haryana	3	21.4	10.2	8.1	8.3	6.1	7.8
Himachal Pradesh	4	23.2	8.7	8.4	12.1	20.4	16.1
Jammu and Kashmir	5	25.9	21.9	13.2	8.8	7.1	7.9
Kerala	6	5.9	3.2	7.0	18.1	15.4	10.3
Maharashtra	7	27.9	14.4	10.8	14.1	14.2	13.8
Tamil Nadu	8	28.2	16.1	15.2	15.5	21.1	20.6
Rajasthan	9	50.3	16.2	10.4	8.0	13.9	13.4
Madhya Pradesh	10	34.8	15.6	14.6	13.4	20.1	11.8
Assam	11	45.9	11.0	7.6	13.0	17.3	10.2
Gujarat	12	29.9	14.3	11.6	15.3	16.9	14.3
Uttar Pradesh	13	46.3	25.6	16.0	13.9	18.8	10.2
Karnataka	14	29.5	20.6	18.9	26.7	14.1	3.3
Nagaland	15	40.4	3.5	10.5	10.2	2.3	23.3
Andhra Pradesh	16	33.7	15.2	20.7	16.4	20.9	19.9
West Bengal	17	35.6	12.5	19.8	5.9	8.2	12.8
Bihar	18	44.8	23.9	25.1	13.9	9.8	14.6
Orissa	19	34.1	23.5	27.6	18.5	22.8	8.8
Manipur	20	57.5	37.9	9.7	14.0	19.6	2.3
INDIA		36.1	17.2	15.5	14.4	15.9	12.6



TABLE 3: EFFECTIVE COST OF EDUCATION PER FUNCTIONALLY LITERATE PERSON

(Per Cent)

States	Total Cost Index			Excess Cost Index			Excess Cost Due to Drop Out			Excess Cost Due to Stagnation		
	Boys and Girls Combined	Boys	Girls	Boys and Girls Combined	Boys	Girls	Boys and Girls Combined	Boys	Girls	Boys and Girls Combined	Boys	Girls
Delhi	127.1	132.2	120.9	27.1	32.2	20.9	15.7	20.4	10.1	11.4	11.8	10.9
Punjab	130.9	132.4	120.0	30.9	32.4	29.0	22.1	23.0	20.8	8.8	9.4	8.2
Haryana	136.2	135.4	162.4	36.2	35.4	38.0	21.1	20.5	22.8	15.1	14.9	15.2
Himachal Pradesh	140.0	134.9	150.1	40.0	34.9	50.1	21.0	16.2	30.2	19.9	18.7	19.9
Jammu and Kashmir	141.6	146.5	129.0	41.6	46.5	29.0	40.5	45.4	27.9	1.1	1.1	1.1
Kerala *	143.1	146.8	139.1	43.1	46.8	39.1	9.2	11.6	6.5	33.9	35.2	32.6
Maharashtra	165.9	157.1	181.3	65.9	57.1	81.3	31.1	24.8	41.9	34.8	32.3	39.4
Tamil Nadu	169.5	164.1	176.9	69.5	64.1	76.4	38.5	34.0	45.0	31.0	30.1	31.9
Rajasthan	179.0	183.2	164.9	79.0	83.2	64.9	53.4	57.1	40.7	25.6	26.1	24.2
Madhya Pradesh	179.1	175.2	190.0	79.1	75.2	90.0	42.2	38.6	51.9	36.9	36.6	38.1
Assam	179.8	178.6	180.9	79.8	78.6	80.9	38.6	32.9	39.7	41.2	30.7	41.2
Gujarat	183.0	181.7	185.3	83.0	81.7	85.3	33.4	32.0	35.5	39.6	39.7	49.8
Uttar Pradesh	202.2	189.4	228.3	102.2	89.4	128.3	69.4	59.3	90.2	32.8	30.1	38.1
Karnataka	210.2	199.1	228.3	110.2	99.1	128.3	49.8	40.3	63.9	60.4	58.5	64.4
Nagaland	210.7	203.9	223.3	110.7	103.9	122.3	30.5	31.9	28.3	80.2	72.0	94.0
Andhra Pradesh	213.0	204.9	225.7	113.0	104.9	125.7	54.3	49.3	62.0	58.7	55.6	63.7
West Bengal	215.8	212.8	218.6	115.0	112.8	118.6	47.1	45.6	49.6	67.9	67.2	69.0
Bihar	223.6	211.3	270.0	123.6	111.3	170.0	81.6	71.6	119.1	42.0	39.7	50.9
Orissa	235.9	219.9	272.8	135.9	119.9	172.8	73.2	59.8	104.1	62.7	60.1	68.7
Manipur	282.3	268.9	308.2	182.3	168.9	208.2	102.0	94.1	115.8	80.3	74.8	92.4
INDIA	185.7	180.8	194.8	85.7	80.8	94.8	46.3	42.6	53.8	39.4	38.2	42.0

\* The rank of Kerala among the states would be the highest today, since stagnation has been completely eliminated in classes I to III from 1972-73. We do not know of any such reform measures having been introduced after 1968-69 in any other state.

TABLE 4: EFFECTIVE COST OF EDUCATION PER PERSON WITH SEVEN YEARS OF COMPLETED SCHOOLING

(Per Cent)

States	Total Cost Index			Excess Cost Index			Excess Cost Due to Drop Out			Excess Cost Due to Stagnation		
	Boys and Girls Combined	Boys	Girls	Boys and Girls Combined	Boys	Girls	Boys and Girls Combined	Boys	Girls	Boys and Girls Combined	Boys	Girls
Delhi	153.3	138.3	131.6	35.3	38.3	31.6	22.3	25.1	18.6	13.0	13.3	13.0
Punjab	160.0	145.6	191.3	60.0	45.6	91.3	49.4	35.7	79.0	10.6	9.9	12.3
Haryana	149.2	138.6	189.8	49.2	38.6	89.8	34.0	24.2	69.5	15.2	14.4	20.3
Himachal Pradesh	195.0	164.9	307.2	95.0	64.9	207.2	70.3	43.1	168.7	24.7	21.8	38.5
Jammu and Kashmir	150.9	162.0	126.6	50.9	62.0	26.6	49.5	60.5	25.0	1.5	1.5	1.6
Kerala*	196.8	190.2	203.0	96.8	90.2	103.0	49.5	43.9	47.9	47.3	46.3	47.9
Maharashtra	204.7	188.7	238.9	104.7	88.7	138.9	68.2	56.0	93.6	36.5	32.7	45.3
Tamil Nadu	249.7	226.3	294.1	149.7	126.3	194.1	104.4	84.8	141.3	45.3	41.5	52.8
Rajasthan	205.5	202.2	218.0	105.5	102.2	118.0	77.8	75.2	91.7	27.0	27.0	26.3
Madhya Pradesh	223.7	214.1	256.5	123.7	114.1	156.5	84.0	75.6	111.5	39.7	38.5	45.0
Assam	215.2	211.9	242.7	122.1	111.7	142.7	60.0	52.9	73.5	62.1	58.8	69.2
Gujarat	230.0	224.7	242.2	130.0	124.7	142.2	77.2	72.3	86.8	52.8	52.4	55.4
Uttar Pradesh	241.2	204.9	404.9	141.2	104.9	304.9	103.8	73.6	239.9	37.4	31.3	65.0
Karnataka	254.6	224.2	313.5	154.6	124.2	213.5	86.5	63.1	133.6	67.8	61.1	79.9
Nagaland	257.6	251.4	264.1	157.6	151.4	164.1	62.7	67.7	53.8	94.9	83.7	110.3
Andhra Pradesh	296.2	255.3	397.0	196.2	155.3	297.0	120.6	92.4	189.8	75.6	62.9	107.2
West Bengal	222.1	211.7	242.7	122.1	111.7	142.7	60.0	52.9	73.5	62.1	58.8	69.2
Bihar	248.2	224.4	337.2	148.2	124.4	237.2	196.1	91.9	173.4	42.1	32.5	63.8
Orissa	295.8	258.4	420.5	195.8	158.4	320.5	122.8	93.6	222.7	73.0	64.8	97.8
Manipur	296.2	255.3	397.0	196.2	155.3	297.0	120.6	92.4	189.8	75.6	62.9	107.2
INDIA	227.2	208.1	268.8	127.2	108.1	168.8	83.1	68.6	118.7	44.1	39.5	50.1

\* The rank of Kerala among the states would be higher now, since stagnation has been eliminated in classes I to III and reduced significantly in classes V to VII from 1972-73.

tion for the system as a whole and the corresponding partial wastage of resources.  $N$  can also be used for computing the fraction of students initially enrolled in Class 1 who leave the system with completed education of

the  $j^{\text{th}}$  standard. Similar calculations can be made in respect of students initially enrolled in class  $i$  (instead of 1). For this purpose we write  $R$  as the following diagonal matrix.

$$R = \langle\langle r_{ij} \rangle\rangle$$

where  $r_{ij} = 0$  for  $i \neq j$   
 $r_{ii} = p_i, 8$

Then,

$$(5) M = NR = \langle\langle f_{ij} \rangle\rangle$$



gives the required fractions; viz,  $i_f$  = the fraction of students initially enrolled in class  $i$  who leave the system with  $j^{\text{th}}$  class as their highest educational attainment.

**Data:** Entry into the school system is generally made only at the first standard (the equivalent of a class or a grade) though there may be stray cases of children being admitted to higher standards after private studies. A few children who had dropped out from the system during some previous years may also rejoin every year. Enrolment in each class may also be affected due to migration; mortality of students too affects enrolment. Since the net changes due to the above reasons are likely to be negligible and there exist no data on these phenomena on a statewide basis, we have not taken them into account in this analysis.

#### *Derivation of Flows from Stock Data:*

In order to get the transition ratios of students enrolled in each standard, the annual flows into the three categories mentioned have to be found out. The available data give only the enrolment on March 31. Below we attempt to estimate the flows from the group of 1967-68 into the year 1968-69. The enrolment data relating to these two years are taken from the Annual Report in form A prepared by the departments of education of the various states and submitted to the Ministry of Education, Government of India. The subsidiary statements in form A 2 (Table 4 on stagnation at elementary stage) shows the number of first year students and repeaters in each of the standards I to VII.

Combining the above two sets of data, we can obtain the following flows from standards I to VI:

- (1) the number of students enrolled in each standard on March 31, 1968 who were in the same standard on March 31, 1969; viz, the repeaters;
- (2) the number of student in each standard on March 31, 1968 who went into the next higher standard on March 31, 1969; viz, the promotees;
- (3) the number of students in each standard on March 31, 1968, who were not at school on March 31, 1969; viz, the drop outs.

These ratios of transition have been worked out separately for boys, girls and boys and girls (combined).

The matrix  $(1-A)^{-1}$  referred to earlier, giving the expected number of years spent by pupils in the different stages of the system is calculated. The first row in each of these matrices gives the number of years that a class I group spends in the different stages. In accordance with the equation (2) we have worked out the disposition of an initial class I group  $n$  years from the point of entry. We have also computed the  $f_{ij}$ , that is, the probability that a pupil in the  $i^{\text{th}}$  stage moves out of the system ultimately with the highest educational attainment  $j$ .

**Results:** From the above exercise we have obtained separately the rates of stagnation in classes I to VII in the different states. In Tables 1 a to c the indices of stagnation for each state are given separately for boys, girls and for boys and girls (combined). The stagnation index is the excess number of years that a student spends in a class, (i.e., the total number of years minus one, since the minimum prescribed period for completing schooling in a class is one year).

**Stagnation:** Tables 1 a to c show that considerable variations are found in stagnation rates among the different states. They are the lowest in Punjab, Haryana, Himachal Pradesh and Jammu and Kashmir, and the Union territory of Delhi. The stagnation rates for boys and for girls do not differ much in the same state. In general, they are the highest in Class I, Kerala and Nagaland being significant exceptions to this general pattern. In Kerala, the rate of stagnation is seen to be almost the same in classes I to VII. (Stagnation rates have been brought down in Kerala since 1972-73.) In Nagaland, the combined rates for boys and girls are seen to be the highest for any state, in all classes (see Table 1c).

**Drop out:** Tables 2 a to c show that the states with the lowest drop out rates are the ones mentioned in the preceding paragraph as having the lowest stagnation rates. Of course, Kerala is the state in which the drop out rate in classes I to III is the lowest among all the states. As in the matter of stagnation, the rates for boys and girls in the same state are close to each other in each class; however, the drop out rates are, in general, higher among girls than among boys. In Kerala it is the other way about; in classes I to III, drop out rates of girls are lower than those of boys. This finding explains why literacy rate rises in Kerala faster

than in other states, both among males and females, even though the initial enrolment in class I in many others is not much lower than in Kerala, particularly the enrolment for boys.

**Index of Cost:** With the data on stagnation and drop out, it is possible to calculate the number of pupil years required in each state, to get (1) one 'functionally literate' person and (2) one person with elementary schooling (a person who has completed seven years of schooling). The excess number of years spent over the minimum prescribed, gives the index of excess cost incurred due to drop out and stagnation. The indices of costs of education of one functionally literate person, and one person with elementary education are furnished in Tables 3 and 4.

Tables 3 and 4 indicate that effective costs are the lowest in Kerala and the states in the north-western part of India. Uttar Pradesh, Bihar, Nagaland, Manipur, Karnataka, Orissa and Andhra Pradesh are the states with the highest costs of education per functionally literate person. When effective costs are calculated per person completing seven years of schooling, Tamil Nadu also falls into the group of states with very high costs. It will be worthwhile to look into the causes for the interstate differences in costs and the existence of regional patterns.

#### Notes

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- 1 H. N. Pandit (ed) "Measurement of Cost, Productivity and Efficiency of Education", NCERT, New Delhi, 1969.
- 2 A functionally literate person is defined as one who has completed four years of schooling.
- 3 For literature on the use of Markov Chain theory for analysing the flows of an educational system, reference may be made to "Mathematical Models in Educational Planning", Technical Reports, Education and Development, OECD, Paris 1967. (See, especially the report of Tore Thonstad, 'A Mathematical Model of the Norwegian Educational System', included in this volume.)



# Variations in Extent and Forms of Agricultural Tenancy—II

## Analysis of Indian Data across Regions and Over Time

Pranab Bardhan

*This paper brings together data on tenancy and distribution of ownership and operational holdings, on unemployment and wage rates, on credit market conditions and on various agronomic conditions.*

*Section II of the paper attempts to relate the regional variations in the extent of tenancy to differences in (a) intensity of irrigation, (b) fluctuations of rainfall, (c) labour-intensity of crops, (d) degree of landlord's monopoly power in the land market, (e) unemployment of landless labour, and (f) imperfections in the credit market. A number of hypotheses on the impact of these factors on tenancy are tested econometrically.*

*Section III similarly tests hypotheses about factors governing the regional variations in forms of tenancy, particularly in the relative importance of share-cropping vis-a-vis tenancy contracts with a fixed rent per acre.*

*Section IV examines the size-distribution of tenants. The author discusses, in particular, the regional variations in the size-distribution of tenants and whether technological and economic factors may explain these variations.*

*The last Section V observes the nature of changes in the extent and form of tenancy over the last two decades, particularly how tenancy contracts are being reshaped by the forces of agricultural progress with special reference to those regions which have achieved a significant breakthrough in production in recent times.*

*The article is published in two parts. Sections I, II and III appeared last week and Sections IV and V are published below.*

### IV

#### Size Distribution of Tenant Farms

IN our model of Section II we assumed all tenants to be landless and in our model of Section III we took two extreme types of tenants, one a landless share-cropper and the other a landed fixed-rent tenant. Let us now go beyond these abstractions and directly take up the question of size distribution of tenants.

There is no doubt that the majority of landless rural households lease in some land<sup>10</sup> (the percentage of landless rural households leasing in some land varied from 49 in Maharashtra to 99 in Assam in 1970-71, according to NSS 26th Round data). In fact, in 1970-71 households having ownership holdings of up to five acres were net lessees of land in almost all states. But the majority of holdings reporting some area under tenancy are cultivated by landed tenants. Table 4 shows that in 1970-71 in all the states (except Kerala and, marginally, Karnataka) more than 80 per cent of the holdings reporting area under tenancy were cultivated by landed tenants.

In some states, even though the majority of tenants are landed, they are typically small farmers. For example, according to NSS 17th Round data,

more than 75 per cent of holdings reporting some area under tenancy in West Bengal in 1960-61 were cultivated by landed tenants; at the same time 58 per cent of total leased-in area was accounted for by below-five-acre size class of farmers. Similarly in Bihar in 1960-61 about 88 per cent of holdings reporting some area under tenancy were cultivated by landed tenants; at the same time about 61 per cent of total leased-in area was accounted for by below-five-acre size class of farmers. There are other states where the typical tenant is a big farmer. In Punjab in 1960-61 nearly half of the total leased-in area was in the size class of farms of 15 acres and above. In Gujarat in 1960-61 about 60 per cent of total leased-in area was in the size class of farms of 15 acres and above. In general the typical tenant is a large farmer in West, Central and North-west India, while he is a small farmer in East and South India.

In Table 3 we have presented the percentages of total tenanted area accounted for by below-five-acre farms in different states in rural India in 1953-54 and in 1960-61. In 1953-54 two-fifths or more of the total tenanted area were in the below-five-acre farms in UP, Bihar, Orissa, West Bengal, Madras, Travancore-Cochin and Jammu and

Kashmir. In 1960-61 more than two-fifths of the total tenanted area were in the below-five-acre farms in UP, Bihar, Orissa, West Bengal, Assam, Madras, Kerala and Jammu and Kashmir. Except for Jammu and Kashmir, all the other states are in East or South India.

What explains such regional variations in the size distribution of tenants? Clearly, if there is a lot of unemployment and underemployment afflicting the landless and small farmer families at the going wage rate, there will be an incentive on the part of large landowners to lease out land to the small farmers and also for the latter to lease in from the former. The more labour-intensive the crop and the more are the diseconomies of scale due to supervision problems, the more is the advantage in leasing out to small farmers. The big leasing out to the small, of course, involves shifting of production risks to cultivators with lower risk-bearing capacity, and, obviously, this is likely to be more acceptable to the small in areas where production risks are relatively low (say, in areas with better irrigation and rainfall) and where the alternative of wage employment is even more uncertain (i.e., in areas with high unemployment).

On the other hand, the larger are



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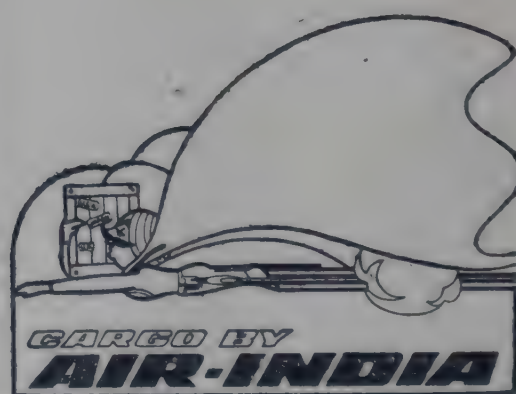




TABLE 3 : PERCENTAGE OF TOTAL TENANTED AREA ACCOUNTED FOR BY BELOW-5-ACRE SIZE GROUP OF OPERATIONAL HOLDINGS

States	1953-54	States	1960-61
UP	46.44	Andhra Pradesh	18.46
Bihar	55.78	Assam	63.45
Orissa	39.81	Bihar	60.53
West Bengal	46.05	Gujarat	12.56
Assam	32.15	Jammu and Kashmir	48.30
Andhra	24.97	Kerala	59.97
Madras	41.39	Madhya Pradesh	13.87
Mysore and Coorg	22.82	Madras	47.62
Travancore and Cochin	53.18	Maharashtra	12.14
Bombay	10.20	Mysore	8.39
Saurashtra and Kutch	2.27	Orissa	45.68
Madhya Pradesh	7.96	Punjab	7.09
Madhya Bharat	5.37	Rajasthan	8.08
Hyderabad	6.39	UP	42.79
Vindhya Pradesh	14.40	West Bengal	58.30
Rajasthan and Ajmer	5.28		
Punjab (including Delhi and Himachal Pradesh)	6.40		
PEPSU	3.61		
Jammu and Kashmir	46.31		

$$R^2 = 0.678$$

$$F = 10.543$$

Here  $X_2$  is the percentage of total cropped area that is under rice, *ragi*, barley and jute;  $X_6$  is the irrigated percentage of cropped area<sup>12</sup> and  $X_7$  is the percentage of tenanted area under contracts in which the tenant may be evicted at will (the state-wise data for these three variables are in Table 1).  $X_2$  is significant at less than 1 per cent level and has the expected positive sign.  $X_6$  is significant at less than 7 per cent level and has the expected positive sign.  $X_7$  is not very significant (it is significant at 16 per cent level), but the sign is positive, which is expected, as it is easy to see why the prevalence of small tenants is positively associated with the prevalence of tenurial insecurity in tenancy contracts.

## V

## Change over the Last Two Decades

Let us now look at the changes in the extent and pattern of tenancy over the last two decades. For this purpose we shall mainly compare the NSS Land Holdings Survey data for 1953-54 (8th Round), 1960-61 (17th Round) and 1970-71 (26th Round). First, the extent of tenancy. Table 1 gives the percentage of operated area leased in ( $X_9$ ) for different states in 1953-54 and Table 4 gives the same data for 1960-61 and 1970-71. The 1953-54 data are not always comparable with later data because the States' Reorganisation in middle 1950s changed the geographical boundaries of many states. Roughly speaking, between 1953-54 and 1970-71 tenancy seems to have declined<sup>13</sup> in most states, with the notable exceptions of Bihar, Orissa and UP, where it has slightly gone up. Comparing 1960-61 and 1970-71, the extent of tenancy seems to have remained the same on an all-India level, but it seems to have significantly declined<sup>14</sup> in Punjab (including Haryana), Kerala, Jammu and Kashmir, Tamil Nadu, Karnataka, Maharashtra and Gujarat; on the other hand, it seems to have gone up significantly in UP, Bihar, Orissa and Assam. The former group of states includes Punjab (and Haryana), Karnataka and Gujarat which had the highest growth rate in agricultural production among all states over the last two decades, while the latter group includes some

the capital requirements of cultivation (either in the form of fixed capital like bullocks, tractors, pumps and tubewells or in the form of circulating capital for purchased current inputs like fertilisers), the big tenant has decisive advantages over the small in the context of a highly imperfect credit market and an imperfect market for hiring services of bullocks, tractors, etc. Raj (1970) also refers to the higher risk (the landlord faces) of default of rent by smaller tenants. But in a situation where share-cropping is the predominant form of tenancy (making recovery of rents and loans easier) and/or the landlord has monopolistic power (particularly in view of the relative ease of evicting smaller tenants), there are many ways in which the landlord can exact his full rent from the small tenant at least over the long or even the medium run.

We have tried econometrically to explain the variations in the percentage (called  $X_{13}$  here) of total tenanted area accounted for by below-five-acre farms as presented in Table 3, in terms of some of the variables presented in Tables 1 and 2. For data relating to early 1960s, we have the following least-squares estimate of a linear equation:

$$X_{13} = -5.429 + 0.510X_2 + 0.257X_5 + 0.305X_{12}$$

(5.170) (0.177) (0.084) (0.189)

$$R^2 = 0.901$$

$$F = 33.366$$

Here  $X_2$  is the percentage of total cropped area that is under the most labour-intensive crops in the Indian cropping pattern (rice, *ragi*, barley and jute);  $X_5$  is the average number of days unemployed for usually occupied men in agricultural labour households and  $X_{12}$  is a composite index of irrigation and rainfall (the state-wise data for these three variables are in Table 2). Both  $X_5$  and  $X_2$  are significant at less than 2 per cent level and have positive co-efficients. This is consistent with our earlier observation that small tenants are likely to be more important in areas where the crop is more labour-intensive (and also involves more supervision problems as in the case of rice) and where there is more unemployment. The co-efficient for  $X_{12}$  is not<sup>11</sup> very significant (it is significant at 14 per cent level), but the sign is positive, which is consistent with our earlier observation that leasing in by smaller tenants will be more in areas where the production risks are low.

For data relating to early 1950s, we have the following least-squares estimate of a linear equation:

$$X_{13} = -10.520 + 0.504X_2 + 0.459X_6 + 0.303X_7$$

(9.031) (0.121) (0.234) (0.205)



of the slowest growing states in agricultural production like Bihar and Assam. It may also be noted that the former group includes some of the states where programmes of conferring rights of ownership on tenants have had some degree of success, as in Maharashtra and Gujarat.<sup>15</sup>

In Section II of this paper we found a significant positive relation between the land improvement factor and tenancy on the basis of inter-regional cross-section data. But the inter-temporal evidence in this Section seems to point to the opposite direction, that over the last two decades tenancy declined in most states while any index of land improvement or agricultural development showed a significant rise. The primary reason for this is related to the impact of protective tenancy legislation in most states or even outright abolition of tenancy in some states. It has led to large-scale eviction of tenants by landlords (apart from driving some of the tenancy underground so that some of the estimated tenancy decline may be purely due to increased under-reporting<sup>16</sup> by insecure tenants). This is a factor obviously not incorporated in our theoretical model in Section II.

In our model the land improvement factor tends to increase the extent of tenancy mainly by raising the wage rate and thereby cancelling the enhanced profitability of self-cultivation by the landlord. It is possible that in areas of recent agricultural progress significant in migration of labour (particularly in the peak season<sup>17</sup>) from poorer areas along with the flooding of the agricultural labour market<sup>18</sup> by the newly evicted tenants (as well as by artisans and other non-agricultural labourers) may have dampened the rise in wage rates and hence induced less leasing out by landlords. The introduction of labour-saving devices in some areas may have also contributed to the decline in tenancy, which is consistent with proposition (C) derived from our model in Section II. It is also very likely that the new agricultural technology makes heavier demands on entrepreneurial decision-making factors as well as on capacity to invest capital and bear risks, which the small share-cropper of yesteryear may have been ill-equipped to provide.

Apart from the extent of tenancy, its pattern itself is changing in very significant ways. Of all holdings reporting some area under tenancy, the per-

TABLE 4 : COMPARATIVE TENANCY IN 1960-61 AND 1970-71

States	Percentage of Operated Area Leased In		Percentage of Holdings Reporting Some Leased-In Area Cultivated by Landless Tenants		Area Under Share-Cropping as Percentage of Total Area Under Share-Cropping and Fixed-Rent Tenancy	
	1960-61	1970-71	1960-61	1970-71	1960-61	1970-71
Andhra Pradesh	9.15	9.01	16.42	3.28	37.70	45.36
Assam	15.36	19.69	37.96	13.67	67.05	56.17
Bihar	10.25	14.50	12.11	1.84	83.60	90.51
Gujarat	5.83	3.91	21.51	7.41	41.97	54.42
Haryana	—	23.26	—	9.69	—	72.04
Punjab	35.39	28.01	27.00	9.02	65.39	52.79
Jammu and Kashmir	14.13	8.06	33.97	3.09	61.49	90.79
Kerala	15.30	8.59	52.98	46.38	17.70	12.13
Madhya Pradesh	6.40	7.46	13.09	1.75	48.88	55.10
Madras	16.55	13.07	15.61	13.58	28.87	49.11
Maharashtra	8.74	6.15	13.68	6.44	23.88	51.62
Mysore	18.16	15.90	25.18	20.75	37.52	43.98
Orissa	10.75	13.46	13.16	14.11	52.71	66.82
Rajasthan	4.87	5.26	42.73	6.94	26.72	55.97
UP	8.06	13.01	12.49	4.89	62.67	81.48
West Bengal	17.65	18.73	24.38	9.49	92.53	96.44
Himachal Pradesh	n a	10.20	n a	6.68	n a	70.30
All-India	10.70	10.57	21.85	15.03	49.82	63.89

Notes : Assam in 1970-71, unlike in 1960-61, excludes Meghalaya and Nagaland.

centage of those cultivated by landed tenants (as opposed to landless tenants) increased substantially between 1960-61 and 1970-71 in all states (except Orissa), as may be seen from Table 4. In many areas there is a distinct shift away from the smaller tenant cultivators, particularly in areas of rapid growth in agricultural production. For example, according to NSS data, while about 12 per cent of all holdings reporting any area under tenancy in Punjab (including Haryana) belonged to the below 2.5 acres size class of operational holdings in 1960-61, the corresponding percentage in 1970-71 was only about 6 per cent. Taking a longer time period,<sup>19</sup> while 39 per cent of all holdings reporting any area under tenancy in Punjab belonged to the below 5 acres size class of operational holdings in 1953-54, the corresponding percentage in 1970-71 was 25.5 per cent.

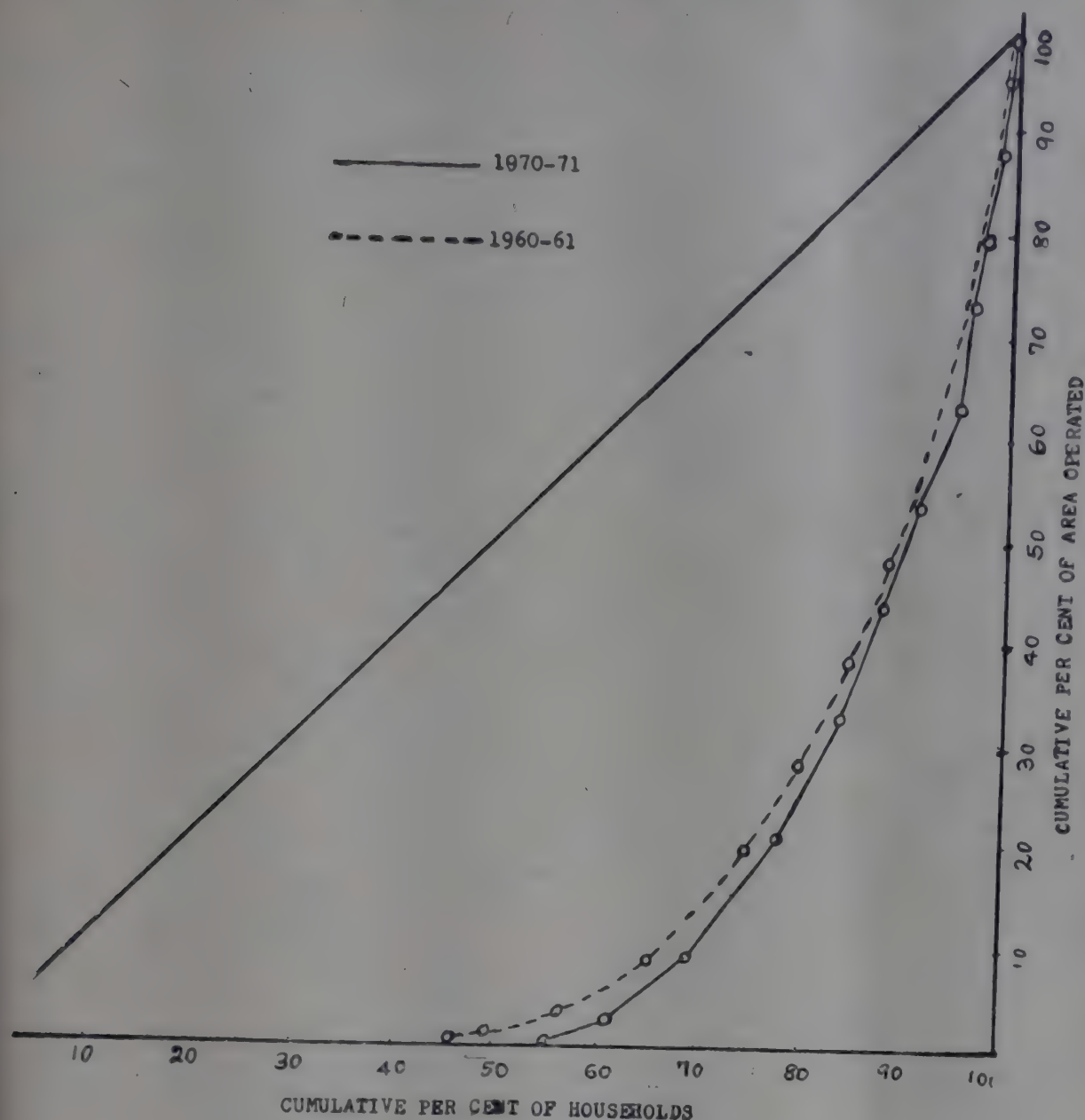
The Farm Management Survey data for Ferozepore (Punjab) show that the concentration index of (net) leased-in area by size class of farms went up between 1956-57 and 1969-70. The average tenant has now a much bigger and better irrigated farm in Ferozepore: in 1956-57 the size of average farm for the whole (Cost Accounting) sample was 23 acres, while that for a

primarily tenant farm (those having half or more of the farm land leased in) was 19 acres, but in 1969-70 the corresponding average sizes are 29 and 28 acres respectively; in 1956-57 the average irrigated area per farm for the whole sample was 16 acres, while that for a primarily tenant farm was 13 acres, but in 1969-70 the corresponding average for both kind of farms is about 26 acres.

Apart from the possibility of increased underreporting of small tenants (disguised as wage labourers), a major reason for the increase in the concentration of tenancy may be a large-scale eviction of small tenants. Where small tenants have not been evicted by landlords, economic pressures may have forced them out of cultivation and made them join the swelling ranks of agricultural labourers, particularly in view of the increased costliness and credit-intensity of new agricultural technology dependent on privately controlled irrigation (pumps and tubewells) and purchased inputs (fertilisers and pesticides) in the context of a highly imperfect credit market. According to the Farm Management Survey data for Ferozepore, nearly 25 per cent of primarily tenant farms belonged to the less than 10 acres farm size category in 1956-57; in 1969-70 not a single primarily tenant farm belongs to



CHART: LORENZ CURVES FOR DISTRIBUTION OF OPERATED AREA IN PUNJAB (INCLUDING HARYANA) IN 1960-61 AND 1970-71



that category. According to NSS data, in 1970-71 in Punjab (including Haryana), even though only 9 per cent of the rural households did not own any land, as many as 54 per cent did not operate any land. The corresponding percentages in 1960-61 were 12 and 39 respectively. The rise in the percentage of non-cultivating rural households between 1960-61 and 1970-71 has been the sharpest in Punjab and Haryana of all states.<sup>20</sup> A comparison of the Lorenz curves of distribution of operated area (see Chart) in Punjab (including Haryana) shows that inequality in this distribution increased unambiguously between 1960-61 and 1970-71. In other parts of the country also a number of micro-surveys have shown — see, for example, the study in Gujarat by Vyas (1970) or that of Bandyopadhyay (1975) in West Bengal — that in the agriculturally more progressive and better irrigated areas a new class of large farmer-entrepreneurs are accounting for an increasing share in total leased-in area.

As to the form of tenancy, is share tenancy being increasingly replaced by fixed-rent tenancy? This seems to be

suggested by Vyas (1970) and Bandyopadhyay (1975) in their above-mentioned studies, by Bharadwaj and Das (1975) for some villages in the newly irrigated zone of Sambalpur district (Orissa) and by the Farm Management Survey data for Ferozepore district (Punjab). No such shift to fixed-rent tenancy was, however, noted by Parthasarathy (1975) and Pal (1975) in their study of changes in rice farming in West Godavari (Andhra Pradesh) and Cuttack (Orissa) districts respectively and by Bharadwaj and Das (1975) for villages in the old delta of Cuttack (Orissa) district, or in 86 out of 89 villages studied by Rudra (1975) in West Bengal. Looking at the NSS data, as given in Table 4, it seems that except in Punjab (including Haryana), Kerala and Assam<sup>21</sup> area under share-cropping as a proportion of total area under share-cropping and fixed-rent tenancy has increased to a significant extent in all major states and also on the all-India level between 1960-61 and 1970-71. (This increase seems to be quite large for Bihar, Jammu and Kashmir, Karnataka, Rajasthan and UP when one compares the 1970-71 data with 1953-54 data

for the roughly comparable states.) In Punjab (including Haryana) there was a small decline in the area under share-cropping as a proportion of total area under share-cropping and fixed-rent tenancy between 1960-61 and 1970-71, from 65 per cent to about 61 per cent.

From the 1970-71 data share-cropping seems to be still the predominant form of tenancy in India, except in the South Indian states, and even in the latter states (with the solitary exception of Kerala) more than 40 per cent of tenanted area is under share-cropping. Of course, the form of share-cropping itself is changing, with increasing prevalence of cost-sharing by the landowner<sup>22</sup> particularly in the purchase of new inputs. This has been associated with a rise in the rental share for the landowner in some areas, but not in others. With increased cost-sharing the landlord may be gradually taking a larger role in the entrepreneurial decisions for the small share-cropper's farm and may soon convert the share-cropping system into nothing but a form of owner cultivation with a piece wage system of paying for labour.<sup>23</sup> The dividing line between a crop-sharing tenant and an attached labourer paid a share of the crop has been rather thin all along in any case. It is not entirely clear that the large-scale survey data can always maintain this subtle distinction and some of the reported increases in the relative importance of share-cropping may possibly reflect the increased need on the part of the farmer-employers for "permanent" labour contracts on account of the larger emphasis on timeliness of operations under the new technology and the larger number of crops being raised in a year.<sup>24</sup>

#### Notes

- 10 It is interesting to note that nearly 50 per cent or more of area leased-in by such landless households in Assam, Gujarat, Maharashtra, Punjab, Haryana, Kerala, Madhya Pradesh, Orissa and Rajasthan is under terms other than crop-sharing or fixed-renting. Some of this may be linked with labour-tying arrangements with the landlord-employer or for house sites for labourers.
- 11 It is likely that the composite index of irrigation and rainfall does not turn out to be very significant simply because it is highly correlated with (the correlation co-efficient is 0.8) another independent variable, the percentage of cropped area under rice, ragi, jute and barley.



- 12 For the early 1950s we did not have the requisite rainfall data, so we could not construct a composite index for irrigation and rainfall as we did for the early 1960s.
- 13 Part of this decline may be definitional unlike in 1953-54, NSS data from later surveys classified land held on long-term lease or long tenure, etc, as owned land.
- 14 If one takes Farm Management Survey data, the percentage of operated area under tenancy declined from 37 per cent in 1954-55 to 12 per cent in 1969-70 in Ferozepur (Punjab), while it remained at about the same 29 per cent rate for Hooghly (West Bengal) between 1956-57 and 1970-71.
- 15 See, for example, Dantwala and Shah (1971).
- 16 For a discussion on this question see Dharm Narain and Joshi, (1969), Bardhan (1970) and Sanyal (1972).
- 17 It can be checked in our model of Section II that if there is a rise in the number of total workers available in the peak season (assumed unity in our model), other things remaining the same, tenancy declines.
- 18 The 1971 census data show a very large increase in agricultural labourers in all states as proportion of the total rural workers compared to the 1961 census, and neither the change in the definition of 'worker' between the two census nor the natural increase of population in agricultural labour households is sufficient to explain this phenomenon. There has also been a significant decline in the percentage of rural non-agricultural workers between the two censuses.
- 19 The estimate for 1953-54 is for Punjab, PEPSU, Delhi and Himachal Pradesh all taken together; that for 1970-71 is for Punjab and Haryana and excluding Delhi and Himachal Pradesh.
- 20 This is consistent with the very large increase in agricultural labourers as proportion of rural workers in this period, as observed in the census data, and cannot be sufficiently explained by any increase in non-agricultural work opportunities. Rajaraman's (1975) retabulation of NSS data for the occupational composition (in terms of main source of income) of rural population in Punjab also confirms the very significant rise in the percentage of agricultural labourers along with a substantial fall in that of artisans between 1960-61 and 1970-71.
- 21 It should be noted that the geographical boundary of Assam

changed significantly between 1960-61 and 1970-71.

- 22 See, for example, Parthasarathy (1975) for West Godavari, Rao (1975) for evidence in Kota (Rajasthan) and Karnal (Haryana) and Rudra (1975) for evidence in West Bengal.
- 23 For a similar view see Parthasarathy and Prasad (1974). Rudra (1975) has noted that in half of the cases observed by him in West Bengal the landowner either himself takes the decision about the crops to be sown on the sharecropper's farm or participates in a joint decision, even when the tenant bears all the costs.
- 24 From NSS data it seems that on the all-India level the percentage of holdings reporting attached farm workers went up from 13.24 in 1960-61 to 18.96 in 1970-71.

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# Family Planning Workers and Problems of Programme Implementation

J K Satia

*The Government of India has recently announced a national policy on population, with several measures to increase the general acceptance of the family planning programme. These measures include higher acceptor incentives, group incentives, multi-media communication strategy, and the offering of an integrated package of health, family planning and nutrition.*

*The present paper argues that greater success in family planning programmes can be achieved by increased efforts towards changing attitudes than by merely disseminating information about family planning more widely. This can be achieved by instituting changes in the implementation of the family planning programme, its organisational structure and process, and the training of family planning workers.*

THE performance of the family planning programme in India has fluctuated from year to year. The performance increased rapidly during the period 1970-73 and then declined. During the last year, it has again increased. The focus of the programme is on terminal methods. Approximately eighty per cent of the births averted are due to acceptance of sterilisation. The remaining twenty per cent of the births are averted primarily by two methods — the IUCD and the condom. Recently the Government of India announced a national policy on population with several measures to increase acceptance of family planning. These include higher acceptor incentives, group incentives, multi-media communication strategy, and the offering of an integrated package of health, family planning and nutrition. Considerable emphasis is also being placed on measures beyond family planning such as population education, female literacy and employment, legislation to raise age at marriage and so on. In view of the above measures it may be worthwhile to examine the programme implementation and steps necessary to improve the performance.

The initial increases in performance were achieved because the favourably disposed segments of the population accepted family planning when the information on methods of family planning services were made available. Now the increase in family planning performance can only be achieved by changing the attitudes of those segments of the population that are, either indifferent or have an unfavourable attitude. The family planning extension worker is the key person employed to create demand; and there is evidence to show that the family planning workers do not seem to put in the necessary effort and that they

are dissatisfied with their jobs. As the implementation process has not changed while the nature of the motivation task has changed from "information-giving" to "attitude-changing", the workers find their work unproductive and non-rewarding. Training and supervision, the usually recommended remedies, are not enough. Several changes in the implementation process need to be made for effectively implementing the "attitude-change" strategy, and unless these necessary changes are instituted, the workers will continue to find their work unproductive.

## NATURE OF PROGRAMME TASK

How do couples adopt family planning? The earliest researchers recognised two conditions for adoption of family planning: favourable attitude towards family planning and knowledge of family planning methods. The desire not to have any more children should also be added as a precondition for acceptance of terminal methods.

A national survey, carried out by Operation Research Group (ORG) in 1971 found that approximately 40 per cent of the couples disapproved of birth control methods, about 50 per cent favoured them, and 10 per cent were indifferent.<sup>1</sup> Of the couples having favourable attitudes, approximately 40 per cent desired to have more children. Of the couples having favourable attitudes and also desiring no more children, 40 per cent did not seem to possess adequate knowledge. Therefore, only about 18 per cent of the target couples satisfied all the three necessary conditions for acceptance. This group accounted for 80 per cent acceptance of the terminal methods.<sup>2</sup>

Only about 50 per cent of these couples who satisfied all the three necessary conditions for acceptance had

finally adopted family planning. Further, analysis of the survey data failed to reveal any one single factor which could explain such a gap. The significant factor limiting the acceptance seemed to be the fear of sterilisation.<sup>3</sup> This fear seemed to have been overcome by two ways. One, when there was a group action in which mutual reinforcement took place and secondly, where the family size had become large enough to be a significant burden on the health and economic capacity of the family. These seem to serve as cues-to-action. Improvements in the performance can therefore be brought about by a suitable mix of four approaches: providing information, changing attitudes, reducing family size norms, and providing stronger cues-to-action. Let us examine the progress made so far in this direction.

Although no national survey after 1971 is available, smaller KAP (Knowledge and Practice) studies have been carried out. A survey of 255 couples<sup>4</sup> reported that about 85 per cent of the couples had knowledge of at least one method. While the knowledge seems to have increased over the years, significant changes do not seem to have occurred in the proportion of couples with favourable attitudes and/or desiring no more children. In the same study, approximately 50 per cent of the couples reported favourable attitude towards family planning. 60 per cent of all couples said that they did not desire any more children.

From the above evidence, it can be argued that a significant improvement in performance can only be had if the programme is able to bring about attitude-change. Applying the information approach to those whose need is an attitude-change approach cannot encourage acceptance.<sup>5</sup> Therefore a constructive attitude-change



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based family planning programme is needed.<sup>6</sup>

#### ROLE OF FAMILY PLANNING WORKERS

Extension education work by family planning programme workers is an important source of demand-creation in the family planning programme. For this purpose, the programme employs about 25,000 male extension workers (Family Planning Health Assistants) and about 50,000 female workers (Auxiliary Nurse Midwives). A hierarchy of supervisory structure has also been developed. Four family planning health assistants are supervised by a Block Extension Educator. Similarly, four auxiliary nurse midwives are supervised by a Lady Health Visitor. This supervisory staff is stationed at Primary Health Centres and is expected to provide technical support and perform other supervisory functions. These immediate supervisors are, in turn, supervised by the Medical Officer-in-charge of the Primary Health Centre. Roughly 35 per cent of the total annual expenditure of the family planning programme (Rs 25 crores) is spent on salary and other direct support for these workers.

The need for effective visits by family planning workers is well established.<sup>7</sup> However, a substantial shortfall exists between the need and the actual effort put in by the workers.

Misra, *et al.*,<sup>8</sup> basing themselves upon the data collected during 1971-72 (after about five years of extension work by family planning workers) found that only 13 per cent of husbands and 8 per cent of wives in villages were contacted. They also noted a high absenteeism rate and low effort put in carrying out the duties by the workers. In a functional analysis study at Narangwal, the time spent by workers on non-job-related activities varied from 60 per cent for male field workers to 40 per cent for female field workers.<sup>9</sup> The administrators have also found that wherever it was possible to ensure a higher quantum of effort by family planning workers, a higher acceptance of family planning resulted. Therefore over the last few years, the programme administrators have recognised the need for action to remedy the situation. In several conversations and meetings, the administrators have referred to this as one of the most serious problems.

Many family planning programme

workers feel helpless and are consequently frustrated. The helplessness seems to stem from a feeling that they do not have the capability to achieve the task given to them — that of motivating acceptance of family planning. Unless the workers are able to bring about attitude-change, their jobs will continue to remain unproductive, and the quantum of work put in by the workers will continue to be low. The programme, therefore, should become an attitude-change programme.

While the literature on family planning has recognised the need for changes in communication strategies and training, and improved supervision, few of these studies deal with the changes necessary in programme implementation. It is not enough to ask workers to work harder; programme implementation should be so changed as to make the worker's job more productive.

#### PROGRAMME IMPLEMENTATION

In the previous section it was argued that the programme needs to reorient itself. Some of the features of the past practices (mainly during 1972-73) are examined here with a view to relate them to the previous orientation of the programme — that of increasing awareness and providing knowledge.

The programme was implemented centrally. The work methodology, funding and staffing patterns, facility needs, training curriculum, transportation system and budgets, and the information system were all worked out by the Central Government.

The workers were trained to provide information on reproductive processes and contraceptive methods to the client couples. They were given kits as an aid in providing this information.

Simple and short messages were used in the mass-communication strategies. The appeal and content of these messages were nearly same in all states. Supervision mainly consisted of inspection and record checking.

The information on eligible couples, maintained by the workers, to plan their visits consisted mainly of age and parity characteristics.

Several instances, where post-operative care had fallen short of desired levels, were reported.

Other agencies were involved with the primary objective of increasing the base rather than quality of interpersonal communication. For instance, revenue workers were able to motivate far more cases than teachers, who could change attitudes perhaps more easily.

All the above features of the programme lead one to believe that the programme

concentrated on providing knowledge, a task in which it succeeded admirably.

The administrators intuitively perceived the change in the nature of programme tasks, and motivated by the need to improve programme performance initiated several measures during the period 1974-76. A national population policy was also formulated. Some of these measures are detailed below.

State governments began to deviate from the pattern, develop their own strategies, and generate resources beyond the funding by Central Government. Notable among these have been Maharashtra, Haryana, Gujarat and more recently Assam. The targets also were related to the potential and past performance of the states.

The Central Government began introducing multi-purpose worker schemes wherein each worker will provide integrated health and family planning services. Besides increasing operational efficiency, one important benefit of the scheme is to improve credibility of the worker.

A multi-media mass communication strategy, different for different states, has been developed by the media experts and will be launched soon.

Considerable emphasis is being placed on involvement of other agencies and the community leaders.

Special sectoral programmes, particularly for industrial labour, are being developed.

As was mentioned earlier, beyond family planning, measures such as population education and female literacy are also emphasised. All these are directed towards building attitude-change processes and should, therefore, lead to increased acceptance. However, the attitude-change processes need to be further strengthened by strengthening programme implementation process. A comprehensive plan of change in programme implementation needs to be instituted. Areas of implementation where such changes are necessary are organisation structure and process, work methodology, training and supervision, communication, training institutions, information system, and involvement of other agencies. Certain proposals for changes in these areas of programme implementations follow.

#### ORGANISATION STRUCTURE AND PROCESSES

The unfavourable attitudes towards family planning seem to stem from many reasons largely local in origin and character. For instance, rumours



about the post-operative complications have been one of the reasons for unfavourable attitude in several areas. Attitude-change is a complex process and requires specific approaches tailored to local and even individual needs. Such approaches have to be developed by the local leadership. Therefore, decentralisation of the programme implementation would be necessary. It is not enough to provide freedom and flexibility to plan the programme methodology; active stimulation of organisational processes is needed for development of such plans.

Currently, the annual planning process consists of deriving an agreed set of targets for the year, and no annual plan of the activities that would lead to achievements of the targets is prepared. It is suggested that the programme administrators should encourage development of such annual plans starting at the Primary Health Centre level. Such a process will also result in an indirect benefit by increasing the commitment of people involved in planning to achieve the set targets. Since it is not possible to vary annual financial budgets, a system of annual activity budgeting needs to be instituted. In short, a process of communication flow that originates at lower levels and consists of reporting not only the accomplishments but also future plans and programmes is necessary.

At the national level, in theory, the resources should be allocated so as to produce maximum acceptance. This would mean that regions where acceptance may be difficult to generate would have to be ignored. Perhaps such an approach is not feasible. But some flexibility needs to be built in the budgeting process so that local levels have flexibility in allocating at least part of the budget to activities they think will generate acceptance in their own regions. A beginning in this direction could be made by initially providing 10 per cent of the total budget as 'non-committed budget'.

Monitoring processes should also be modified to introduce decentralisation. A two-part monitoring process<sup>10</sup> will be needed, the first based upon quantitative data, and the second upon qualitative data and direct observation in the field. The first part should not only measure accomplishments but also ensure that adequate inputs are provided. It should also directly point out

where the problem areas are and which are the units responsible for these areas. The second part of the monitoring can then take over. The supervisors should visit the problem areas and identify the causes of the problems. The corrective action can then be instituted.

Communication for attitude-change would have to be specialised to appeal to different groups. This requires specialised skills to deal with different groups such as industrial labour, teachers, government servants, members of the co-operatives, farmers, agricultural labourers and so on. Such abilities need to be developed in the programme personnel.

Changes in the organisational structure are needed to encourage such sectoral specialisations. These changes are needed at all administrative levels. At the national and state level, other ministries would have to be more actively involved. At the district and block level, the extension educators would have to be trained specifically for matching their capabilities to the appropriate market segmentation. A study by Nambudiri and Sharma<sup>11</sup> of the family planning programme in the organised sector identified programme management skills as a critical need. Specific role descriptions would have to be created within the organisation to supply such skills.

The present programme structure is also changing with the introduction of multi-purpose worker scheme. In this scheme a worker is providing both health and family planning services to the community. If the community perceives the worker to be helpful, then the credibility of the worker would increase and interpersonal communication would become more effective.

#### WORK METHODOLOGY, TRAINING AND SUPERVISION OF WORKERS

The methodology for motivation used by the workers should emphasise soft-selling. Soft-selling of family planning is characterised by an indirect and low-key approach. The worker should point out both good and bad points of family planning methods to prospective clients. Case studies of workers carried out by Patnagar and Dey<sup>12</sup> give a detailed account of the processes of attitude-change that the worker was able to bring about by soft-selling. A case study carried out by Gupta<sup>13</sup> of a high-performing and a low-performing worker with similar

backgrounds also underlines the importance of soft-selling. The workers need to be trained in this type of motivation approach.

The role of the workers should also be creative and innovative to meet the needs of the client. They should develop diagnostic ability for identifying causes of unfavourable attitude and then influence the attitudes through appropriate attitude-change processes. Several examples can be cited. If a client has an unfavourable attitude because he has certain notions about after-effects of sterilisation, an acceptor could be used to clarify his doubts. If a person formulates his attitudes by what the leaders believe, such leaders could be used to create favourable attitude.

To be able to tailor the interpersonal communication to meet individual needs, supervisors should also develop problem-solving capability. Both the training of the workers, and supervisory processes would have to be appropriately strengthened.

#### MANAGEMENT OF MASS COMMUNICATION

It is recognised by the researchers in the communication field that mass-media cannot play an important role in bringing about attitude change. "Mass-media exposure is able to create a generally favourable mental set towards change, but has seldom been able to form or change specific attitudes towards new ideas, specially strongly held attitudes like those involved in the family planning behaviour."<sup>14</sup> To bring about attitude-change we therefore need to integrate mass and interpersonal communication.

One of the difficulties in bringing about such integrated communication is the fact that different people manage these channels. The agencies which manage mass-media communication are either commercial agencies, or are concentrated in a special department, while interpersonal communication is managed by the programme administrators at Primary Health Centre level. Therefore, while an impressive infrastructure for interpersonal communication has been built up and the best media talents have been harnessed to devise mass communication campaigns, integrated campaigns have not yet been implemented effectively.

Since the usual media do not reach the rural areas, the Government of India had set up an information and



education unit in each family planning district bureau. They were expected to work in close contact with the other information and education activities of the district. A van, a projector and films were supplied to district bureau to hold film shows and exhibitions in rural areas. Unfortunately, the performance of these units has not always been good, particularly where the infrastructure and transport is poor.

For a communication campaign, a van with a working projector, a projectionist, right type of films, and the presence of the district health and education officers is necessary. The local worker needs to be informed of this, well enough in advance, so that he can publicise the show to the community and collect the right type of audience. But since transport and communication are unreliable, it is not possible to meet the planned schedules. Consequently, the workers are hesitant to announce the shows in advance and effectiveness of the film shows is considerably reduced. The purposes for which the system was built have not been fulfilled.

It is not possible here to give detailed suggestions for redesigning this system. But the facilities should be located where equipment could be repaired easily. It should also be given more flexibility in terms of procurement of supplies. This may indeed result in more centralisation. Such units could provide service based upon the requests of district officers, but will have to ensure a high reliability in terms of meeting planned schedules.

#### TRAINING INSTITUTIONS

The training needs of workers and supervisors were mentioned earlier. Several educators in this field have pointed out the need for more field exercises in training programme. They have also emphasised experiential, as opposed to didactic, methods of teaching. A network of training institutes have been set up by the Government of India. But once again this training is largely oriented towards developing skills in providing knowledge.

To make the training more effective, research for increasing the effectiveness of training institutions is necessary. Irrespective of the optimal institutional setting that could be designed, it is clear that more feed-back should be provided to the agencies involved in training by both trainees and program-

me administrators. Multi-phase training programme could be devised to ensure that there are frequent opportunities for contact between trainers and trainees. The trainers need to have considerable experience in actual problems of carrying out attitude-change communication strategies and should more directly interact with programme managers. The training programme should not be perceived as a task, separate from the task of programme managers. Programme managers should directly involve themselves in training of "problem-solving types". By the same reasoning, the trainers should be involved in implementing the programme and in providing direct assistance to the administrators.

#### INFORMATION SYSTEM

The following supportive information on clients is maintained by the family planning workers in the target couple registers for their extension activities. Name and address of the couple; Religion; Age; Parity, number of male and female living children; Dates of visit to the couples; and Family planning progress. Recently it was suggested that attitude of the couples towards family planning should also be included. Although a priority scheme based upon the parity and the number of sons has been worked out, the workers do not find this information to be of much use and therefore do not maintain updated target couple registers.

For the target couple register to be effective and useful, changes in the target couple register methodology are necessary. These include maintaining more detailed information on the couples' attitudes, desire for children, knowledge and intention to act, and suggest preparation of explicit visit plans by the workers. It is also suggested that such detailed information should be maintained, not on all couples, but only on a selected segment of the target couples. Such information systems would have to be developed by the workers, and training in compiling and use of such data would also have to be provided to the workers.

#### INVOLVEMENT OF OTHER AGENCIES

Even though a large number of extension workers are employed by the programme, the task of attitude-change is enormous. Nearly 80 million couples need to be contacted. With the exist-

ing level of staffing, each couple cannot be visited more than once in a year. Such a low frequency of contact may not result in a significant attitude-change. Therefore, the base of interpersonal contacts and motivational work needs to be expanded. Secondly, credibility of the communicators also needs to be increased. For this purpose involvement of other agencies is usually sought. The question is — which are the most relevant agencies and how one can secure their involvement? While ranking the credibility in diffusing agriculture innovations, Roger<sup>15</sup> cites studies in Columbia and in Brazil and gives the following rankings (ranging from lower to higher credibility): newspapers, commercial salesmen, neighbours, radio, school teachers and extension agents. The involvement of teachers would thus seem to be the most productive. In an experiment conducted in a district in Maharashtra, teachers were able to motivate approximately 30 per cent of the total acceptors for sterilisation. The need to involve teachers is well recognised by the programme administrators; but how to secure such involvement is not clear. A study carried out by Gupta and Shingi<sup>16</sup> suggests a strategy to ensure involvement of teachers on a continuing basis. This strategy involves legitimisation of family planning workers in the regular educational hierarchy, reward through the regular department channels in the form of additional increments, opportunities for further self-development for exceptional performance, improvement of interaction between family planning workers and the teachers, and short duration orientation programmes. The emphasis, therefore, has to be on involvement of the Ministry of Education in the legitimisation of such activities. The co-ordination at the lower level cannot be ensured unless necessary steps are taken both at the state and national levels.

#### Notes

- 1 Measurement of attitudes raises several theoretical issues and an extensive amount of literature is devoted to these issues. Here, the response of a couple to a simple question, "Do you approve of family planning" is used to measure attitudes. This approach does not consider the complex set of variables which may influence the response, but for purposes of this paper, such a simple interpretation will suffice.



- 2 Bhatnagar S: "Adoption of Family Planning — A Process Model and Optimal Pattern for the Visit of a Field Worker", Unpublished Dissertation, Indian Institute of Management, Ahmedabad 1975.
- 3 Murthy N: "Case Studies of Acceptors and Non-Acceptors", Unpublished Report, Population Project Unit, Indian Institute of Management, Ahmedabad, 1976.
- 4 Bhatnagar: *op cit*.
- 5 Rogers E M: "Communication Strategies for Family Planning", The Free Press, New York, 1973. Rogers suggests that the most important task facing the family planning programme is to reduce the difference between the levels of knowledge and attitude, on one hand, and adoption of practice, on the other, the so called KAP gap. He says:  
 "Consider the specific case of this lacuna in India, where the world's largest family planning communication efforts have largely accomplished one very important goal, but are yet faced with a much more difficult objective...the major function of family planning communication activities should now be to persuade, to convince, to motivate overt behavioural change. It is not to inform. The erroneous assumption of family planning officials is that awareness-knowledge automatically causes motivation; it does not."
- 6 Changes in attitudes can only bring about acceptance of family planning as long as couples do not desire more children. To achieve the ultimate objective of family planning, norms of family size must be reduced. It is universally recognised that such norms are affected by socio-economic developments. There is a problem, however. Most developmental strategies tend to increase the value of labour, and in the current socio-economic context, influence fertility to increase. Therefore operational linkages between development and fertility-reducing programmes are necessary. Action research on such linkages is needed.
- 7 Mishra B D, Simmon R, Ashraf A, and Simmons G: "Family Planning in Uttar Pradesh — Final Report of the Kanpur Project", an Unpublished Report, May 1975. They constructed a Path Analysis Model to assess the determinants of contraceptive practice at the village level. They say:  
 "The most interesting question that can be asked of this model is, what is the relative contribution of the number of visits, a measure of family planning input, and of literacy, a measure of the socio-economic environment as it affects fertility decisions. The effects of each can be calculated as the sum of the direct influences and the indirect influences. The elasticity of changes in literacy is 0.6 and with respect to increase in the proportions of households visited is 0.3. Thus one per cent increase in the level of literacy in the village has twice the impact that a one per cent increase in the proportion of households visited would be expected to have. If, however, one recognises the cost and expense that would be involved in increasing the literacy by one per cent as compared to the cost of increasing the number of households visited by one per cent, it is clear that visits concerning family planning, a directly operational variable, contain considerable potential as a mean of raising the amount of contraceptive use. In short, then, we find that although basic socio-economic conditions that pertain to any given village may be important determinants of the responsiveness of the population to the family planning programme, the amount of effort which has been made to actually contact the village population about family planning is also of great importance." Bhatnagar, *op cit*, found that the acceptance of family planning in a sample of 250 couples could be nearly doubled if a proper pattern of visits was followed.
- 8 *Ibid*.
- 9 Reinke W A, Sarma R S S, Parker R L, and Taylor C E: "Programme Experience in Family Planning as Integrated with Selected Health Activities: A Report on the Narangwal Project", paper presented at WHO Scientific Group Meeting, Geneva, 1973.
- 10 For the description of a proposed PHC monitoring system, see "Management Information and Evaluation System for Health and Family Planning Programme", Technical Report, Population Project Unit, Indian Institute of Management, Ahmedabad, 1976.
- 11 Nambudiri C N S, and Sharma B R: "Strategy for Family Planning in the Indian Industrial Sector", Unpublished Report, Indian Institute of Management, Ahmedabad, 1975.
- 12 Patnagar P, and Dey L, "Social Communication in Family Planning: A Case Book", Orient Longman, New Delhi, 1974.
- 13 Gupta V K: Sri Sen and Sri Basu: Case', Population Project Unit, Indian Institute of Management, Ahmedabad.
- 14 Rogers, *op cit*.
- 15 *Ibid*.
- 16 Gupta V K, and Shingi P M: "Expanding the International Communication Base for Family Planning — A Study in Co-ordination with Other Agencies", Technical Report, Population Project Unit, Indian Institute of Management, Ahmedabad.

## UN Statistical Yearbook

THE latest issue of the United Nations Statistical Yearbook, 1975, describes the main features of the world's economic activity in 1974. It provides information on population trends, national product and income, agricultural and industrial production, energy, world trade and transport, finance, consumption, housing, education and culture. Also covered are such areas as hospital establishments, educational institutions, cinema attendance and radio and television receivers in use.

Among the facts revealed in its 934 page compilation of detailed statistics are the following: World gross domestic product increased by 4 per cent; world industrial production also expanded by 4 per cent; centrally planned economies increased production by 9 per cent, as did developing market economies; developed market economies did not expand their industrial production; world agricultural output per capita in 1974 was slightly lower than in 1973; world production of wheat and maize was less by 5 per cent each and rice by 1 per cent compared with the 1973 level; world energy consumption increased by only 0.5 per cent, considerably less than in 1973 when the figure was 5.8 per cent;

world export of goods in 1974 reached \$ 348,700 million, a 45 per cent increase over 1973; export prices of developed market economies increased by 12 per cent, the prices of exports from developing countries grew only by 4 per cent.

The world's population in mid-1974 was estimated to be 390 billion, an increase of 280 million in the four years since mid-1970. During this four-year period the world's population has been rising at an average annual rate of 1.9 per cent. The population in northern Europe increased at a rate of only 0.4 per cent per annum during the period but some areas of Latin America had an annual average increase of 3.3 per cent.

The industrial production index for the world was 127 in 1974 (1970 = 100), up from the 1970 figure of 122. This indicates that industrial output of the world expanded by 4 per cent in 1974, reflecting increases of 9 per cent for the centrally planned economies and 2 per cent for the market economies. The 2 per cent increase resulted completely from the rise of 9 per cent in the developing countries since the output of the developed countries in 1974 barely reached its level of 1973.



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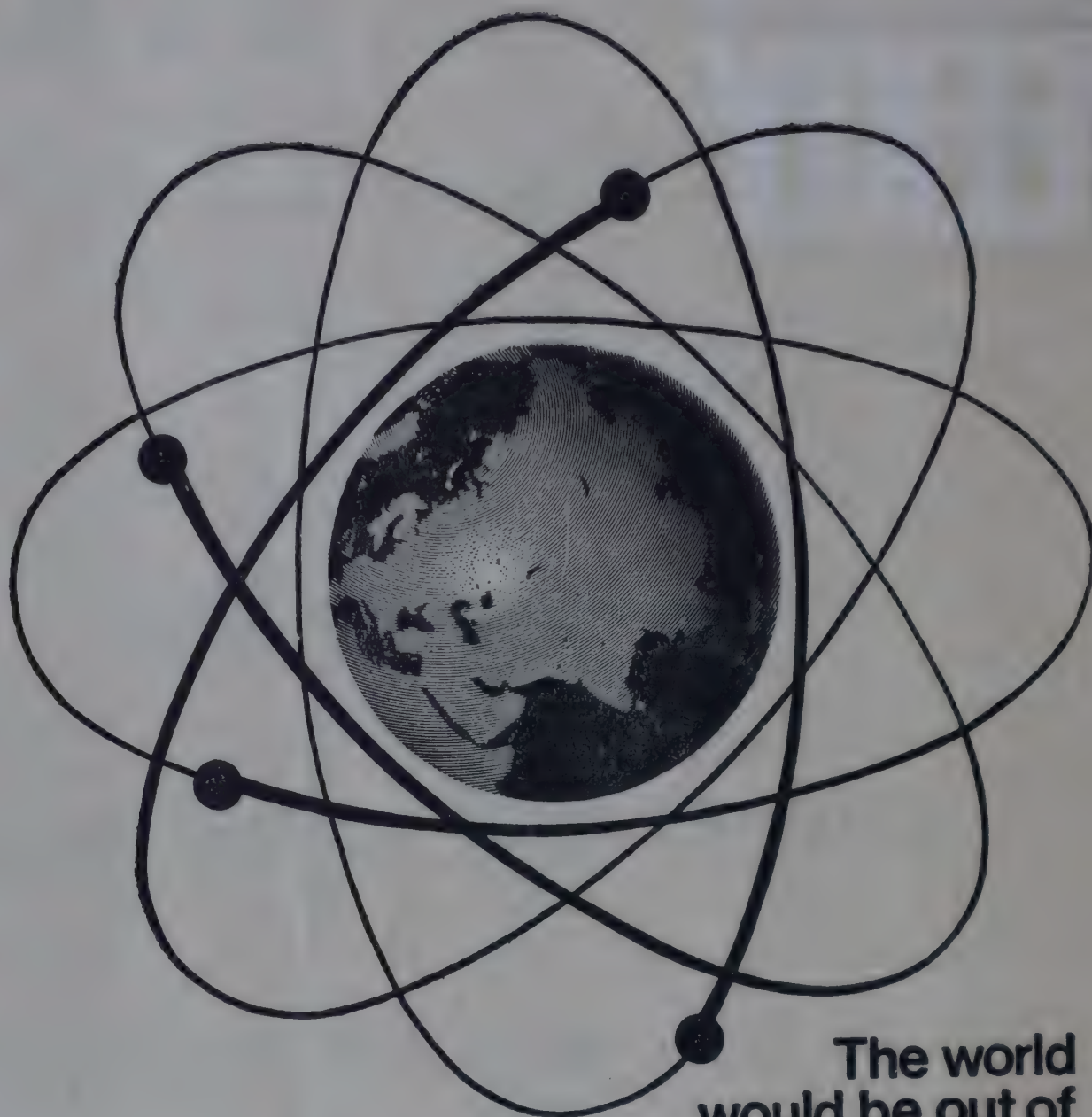
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# ECONOMIC AND POLITICAL

# WEEKLY

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# Syria's War on Palestinians

AGAIN and again, it is being demonstrated that the principal enemy of the Palestinian people is the reactionary Arab regimes. During the heyday of Nasser, when bourgeois Arab nationalism properly buttressed with anti-imperialist slogan-mongering was equated with everything truly progressive, these reactionary Arab regimes were easily identifiable as consisting of the yet flourishing monarchies. The 'Voice of the Arabs' radio in Cairo was ceaseless in its calls to the Arab people in these countries to overthrow their rulers and establish republican regimes. By the time Nasser died, the old style kings had been overthrown except in Saudi Arabia and Jordan; and though the Sheikhs in the Gulf had emerged, thanks to the boom in oil prices, in even greater splendour than the old style kings of Iraq or Libya, it is now not these authentically reactionary sheikhs who pose the greatest danger to the Palestinians, but the so-called republican regimes.

Of these, the most notable recently has been the Syrian regime. The open Syrian involvement in the Lebanese civil war on the side of Phalangists might have been explained away, in its initial stages, as a thrust designed to save itself from possible Israeli reprisals if the balance of forces in Lebanon tilted too much in favour of the nationalists and the leftists. But it is no longer possible to do so today. The Syrian Regime knows perfectly well who are the interests who have been propping up the Phalangist minority in Lebanon with arms and political support. It is also aware of the larger stakes involved in the continued existence of Lebanon under the overall control of rightist forces. Despite all this, Syria has waged a bloody war against the Palestinians and the leftists in Lebanon.

It was thought at first that the Syrian regime hoped to negotiate some sort of a settlement concerning its own territory, the Golan Heights, at present under Israeli occupation, once it convinced Israel of its good faith by countering the Palestinian and leftist advance in Lebanon. But the intervention in Lebanon has gone far beyond the requirements of such a calculation. The charges that have been consistently levelled against the Syrian leadership by the leftist forces in Lebanon, that Syria was in fact involved in a deep conspiracy with Israel, even more than with the Phalangists, to crush the Palestinians have received unexpected support from quarters which would have normally wanted to hush up any evidence in support of such a conspiracy. But what the *Time* newsweekly has revealed has long been evident from the actions of Syria. For, nothing else can explain the continued Syrian attacks on the Palestinians, long after whatever 'limited objectives' the Syrian intervention is supposed to have had had been achieved. It is now over four months since the Syrian army marched into Lebanon, with the ostensible purpose of preventing the partition of Lebanon, a prospect which, according to Syria, was inevitable if the civil war had continued. But the Syrian intervention has not been able to stop the slaughter, precisely because the purpose of the intervention was not any stopping of the slaughter, but tilting of the balance of forces in Lebanon in favour of the Phalangists.

Such a tactical gain was indeed achieved by the successful completion of the term of office of the Phalangist president. But the earlier expectation that the offensive against the left would cease with the installation of Elias Sarkis as president has been belied; if anything, there seems to have been an intensification of the offensive, and the co-ordination between Syria, Israel and the Phalangists seems to be working with murderous effectiveness. What is interesting to note, in the middle of all this, is that Syria itself has never been less than enthusiastic in its public identification with the Palestinian cause, and correspondingly, with its determination to undo Zionist aggression and expansion in Arab land. In fact, even as the Syrian army was marching into Lebanon, the Syrian information minister was declaring: "Our understanding of peace remains ... unchanged. We want a total withdrawal by Israel from all territories it captured in 1967 June aggression and the recognition by Israel of the legitimate rights of the people of Palestine." In all this, the words and the actions of the Syrian regime are quite consistent with the words and actions of many other third world regimes who successfully combine the mouthing of the most progressive declarations of intent with the most reactionary kinds of action.



## Foreign Exchange Reserves

### Curious Approach

THE manner in which the problem of what to do with our foreign exchange reserves is being approached within the government is most curious considering (a) that we are supposed to have over two decades of economic planning behind us and have just given final shape to the fifth in the series of five-year Plans; (b) that for almost all of this period lack of foreign exchange has been accepted as one of the major constraints on higher investment and faster growth; and (c) that it has been one of our explicitly stated objectives to reduce, and do away with, dependence on foreign aid.

An important factor influencing the official attitude to the relatively easy foreign exchange situation evidently is the fear that it might adversely affect the quantum of aid that we may get next year. There has taken place a sharp rise in the flow of aid in the first three years of the Fifth Plan. Receipts from external assistance during this period have been Rs 3,534 crores, which is 46 per cent higher than the draft Plan's estimate of external assistance of Rs 2,443 crores in the entire five-year period. As a proportion of the total public sector outlay in the first three years, receipts from external assistance have amounted to 18 per cent. The draft Plan had by comparison expected external assistance to amount to just 6.5 per cent of the public sector outlay.

The formal commitment to dispensing with aid notwithstanding, we are evidently most anxious to sustain the flow of aid at the current high levels. This is understandable once it is recognised that the primary function of aid today is not so much to provide foreign exchange to make possible much-needed imports for the development programme as to make up for the insufficiency of domestic savings and provide budgetary support to the government. The forms of aid have changed accordingly, as can be seen from the IDA loans for agricultural development or the loans to finance current maintenance imports. In that sense, aid has become more, not less, indispensable. Hence the anxiety to ensure that the accumulation of foreign exchange reserves does not jeopardise the prospects of fresh aid.

The suggestions which have been advanced for using the foreign exchange reserves are equally noteworthy. No one seems to be suggesting that the foreign exchange reserves should be used for vital development projects — such as, for instance, one or more of the proposed steel plants in the south — which it would not have been possible otherwise to take up for want of foreign exchange. Instead what is being proposed is quite simply further liberalisation of imports. Many seemingly weighty justifications are being advanced in support of such a step. It is being argued that import of certain essential consumption goods will help keep prices under better control; that a whiff of competition from imported goods will do our industries a world of good; or that the import of lower priced capital goods will encourage investment by reducing the cost of investment.

These arguments notwithstanding, further liberalisation of import policies, especially in relation to capital goods, can only result in a worsening of the malaise currently affecting industry. Prolonged low levels of investment together with indiscriminate licensing and capacity-creation have already led to severe under-utilisation of capacity in a number of industries, including many capital goods industries. The alleged cost advantage of imported capital goods will be therefore, more than offset by the cost of keeping domestic capacity idle or by the subsidy involved in the search for export markets.

### Language Question

#### New Rules on Use of Hindi

THERE has been an increase in the tempo of efforts to promote the role of Hindi as the official language. A major step in this direction was the constitution of a committee of Parliament on the official language. Newspaper reports of the appointment of the committee mentioned that the Minister of State for Home, Om Mehta, was the chairman of the committee; they did not, however, give the names of the other members.

Article 344 of the Constitution provides for the appointment of a commission on the official language, first, five years after the commencement of the Constitution and then again after another five years. The Constitution also provides for the appointment of a Parliamentary committee to examine the

recommendations of the commission and to report on them to the President.

However, only one commission, the Kher Commission, has so far been appointed under Article 344. The Parliamentary committee to examine the Kher Commission's recommendations completed its work in 1958. Thereafter for more than 15 years no commission, and therefore no Parliamentary committee, was appointed — presumably so as to avoid reopening the volatile language question. In the present instance, a Parliamentary committee has been appointed though, of course, it will not have the recommendations of any commission to examine and report on to the President, as provided in the Constitution.

It is significant to note that the Constitution requires that a commission under Article 344 shall consist of members representing the different languages specified in the Eighth Schedule. It is also stipulated that in making its recommendations the commission shall have due regard to "the just claims and the interests of persons belonging to the non-Hindi speaking areas in regard to the public services". Such requirements do not apply to the committee of Parliament, like the one now constituted.

Along with the constitution of the committee many other formal and informal measures have been taken to expand the use of Hindi as official language. The Railway Ministry, under Kamlapati Tripathi, has been particularly active in this regard. At an 'all-India Hindi railway week' organised by the Western and Central Railways in Bombay, Tripathi advised that just as the railways had brought the different regions of the country together, they should now carry Hindi to every citizen. The Ministry of Industry and Civil Supplies has set up a Hindi Advisory committee on the progressive use of Hindi in official work. It has also been made compulsory now for Central government employees nominated to Hindi classes to attend the classes regularly and to appear for the prescribed examinations.

Most important, the government has now formulated comprehensive new rules for the use of Hindi by Central government offices, including offices of corporations and companies owned or controlled by the Central government, in their correspondence with offices and individuals in the different states as well as with other Central government offices. The new rules require that communications from Central government offices to the Hindi-speaking states "shall, save in exceptional cases, be in Hindi". If any such communication is issued in English, "it shall be accom-



panied by a Hindi translation thereof". This applies to communications to any office (other than a Central government office) or person in the Hindi-speaking states.

Under the new rules, the states have been grouped into three 'regions'. Region A consists of the Hindi-speaking states which have been identified as Himachal Pradesh, Haryana, Rajasthan, Madhya Pradesh, Bihar and Uttar Pradesh and the Union Territory of Delhi. Region B consists of Gujarat, Maharashtra and Punjab and the Union Territories of Andaman and Nicobar Islands and Chandigarh. The other states and union territories form region C.

Communications from Central government offices and offices of companies and corporations owned or controlled by the Central government to offices and individuals in region B will also "ordinarily be in Hindi". When such communications are in English, they will be accompanied by Hindi translations. Correspondence from a Central government office to states and union territories in region C "shall be in English". Central government offices in region C may communicate with regions A and B "either in Hindi or in English".

The rules also specify the languages to be used in correspondence between Central government offices. Correspondence between one ministry or department of the Central government and another may be in Hindi or English. Correspondence with attached or subordinate offices in region A is to be in Hindi. Correspondence between other Central government offices situated in region A shall also be in Hindi. Communications between Central government offices in regions B and C may be in Hindi or English (with provision for translations in certain cases). It is also stipulated that replies to communications in Hindi shall be in Hindi.

Other rules notwithstanding, the Central government may now by order specify offices where Hindi alone shall be used for noting, drafting and other official purposes by employees who possess "proficiency" in Hindi. Also, no Central government employee possessing "working knowledge" of Hindi may ask for English translation of any document in Hindi, except documents of a legal or technical nature. (What constitutes 'proficiency' and 'working knowledge' is defined by the new rules.)

The government notification states that the new rules "extend to the whole of India, except the state of Tamil Nadu".

## Sweden

### Too Much of a Good Thing?

IT is hardly surprising that the United States is pleased at the defeat of the social democrat-led government in the recently concluded general elections in Sweden. Nor for that matter is it surprising that, according to a report in the *Financial Times*, the election results have boosted business confidence in that country. On the day Olaf Palme resigned, the Stockholm stock exchange was reported to have reacted with "a record one-day rise in the industrial shares index".

But it is difficult to believe that all this crowing is solely due to any comfort derived from the defeat suffered by a social democratic party. Social Democrats, even of the Swedish variety, certainly hold no terrors for anyone. The Stockholm stock exchange itself turned sharply downwards after the brief burst of elation following the downfall of Olaf Palme. The Swedish capitalists, not to speak of policy-makers in the United States, may safely be assumed to have a fair appreciation of what social democracy really means, in the context of west European politics. Moreover, Sweden is not the only European country where social democrats have participated in or even led the government; in one way or another, social democrats have been playing an extremely influential role in many west European countries since the end of the Second World War. The most important west European country and the very heart of Europe, West Germany, is under that redoubtable social democrat, Helmut Schmidt — than whom one cannot imagine a more dependable ally of the 'Free World', and than whose victory in the forthcoming elections in West Germany nothing could be more desirable in the eyes of the United States and even West German capitalists.

So the explanation for the unconcealed glee with which the defeat of Olaf Palme has been welcomed has to be sought, not in any fundamental threats to Swedish capitalism or to the Free World that the Palme government represented, but elsewhere. The government of Sweden under Olaf Palme had of course taken many steps which should have exasperated the United States. The unequivocal condemnation of US aggression in Vietnam, the generous and substantial aid extended to North Vietnam and the NLF, the asylum offered to those American youths who

fled the country to avoid being drafted to fight in a war they opposed, the facilities offered to representatives of liberation movements in southern Africa to do propaganda work and collect funds — all these were not calculated to win friends in the US government. Whether the Palme government really deserved the reputation of being especially close to revolutionary movements in third world countries is another matter; the radical reputation of successive Swedish governments had not affected the growth of the operations of Swedish multinationals in the very third world countries whose revolutionary movements the Swedish government was supposed to be sympathetic to.

Internally, the forces ranged against the Palme government included not merely the traditional Right, but even sections of those who might otherwise be considered sympathetic to the aims of left wing social democrats. One of the major issues in the elections was the controversy over the continued expansion of nuclear power plants, an issue over which the most heterogeneous elements encompassing the whole-traditional political spectrum from the Left to the Right might come together in defence or in opposition. Even the combination of liberal-centre-right parties which capitalised on the anti-nuclear power plant feeling have not been able to agree whether indeed there ought to be a cutback in the nuclear power plant programme. Yet another issue which turned a section of public opinion against the Palme government was the question of taxes. The comprehensive social security provided under the system apparently had certain built-in contradictions, so that the very people who benefited under the system also began to chafe under the constraints — not to speak of the demands by way of comprehensive and heavy taxes — that characterised it.

However, even after loss of political power, the social democrats have emerged as the largest single party with 152 members in a house of 349. The swing against them has been less than 2 per cent. What is more, the centre-liberal-right combination is still floundering towards an agreed programme and formal assumption of office as a coalition. It is not inconceivable, therefore, that the Swedish people may be called upon soon once again to exercise their franchise, and Sweden's social democrats, as the 'legitimate party of government', may be back in power.



September 25, 1976

## Clippings

Speaking at a reception at the Andhra Chamber of Commerce and Industry, Mr [Brahmananda] Reddy pointed out that if the nation had some benefit out of the emergency, industry and trade have certainly benefited "to such an extent that there has been criticism that they were having their way regarding labour".

*Business Standard*, September 20

Outright state grants for the establishment of industries in backward areas may be introduced in India. The system is prevalent in France. The Industries Minister, Mr T A Pai, said at a press conference here [New Delhi] today on his return from a European tour that he was greatly impressed by the way a French institute for development of backward areas was tackling the problem.

*The Statesman*, September 19

Dr Sankar Ghose, Union Minister of State for Planning, stressed the need for giving more incentives for removing regional disparities.

*Financial Express*, September 22

Production of cloth by the organised mill industry has declined by over 20 mn metres last month, according to the provisional figures released by the Textile Commissioner.

*Business Standard*, September 20

A sea-change has occurred on the controlled cloth front. The problem of accumulation of stocks has virtually disappeared. In its place, the problem of inadequate availability of desired varieties of cloth has cropped up.

*The Economic Times*, September 17

The textile industry may not find it worthwhile to transfer the controlled cloth obligation to the powerloom sector ...

*Business Standard*, September 23

Although the Jute Corporation of India and state co-operative societies are operating at full capacity, [jute] fibre prices have fallen below the minimum statutory level ...

*Business Standard*, September 21

Jute mills not paying the minimum support prices to growers will have to face severe consequences, the Union Commerce Ministry has warned.

*Business Standard*, September 17

The colossal increase in the project cost of Bokaro from Rs 1,270 crores to Rs 1,910 crores has completely eaten up funds for the three new steel plants originally provided in the steel programme [of the Fifth Plan].

*The Economic Times*, September 18

There will be a two-million tonne cutback in the acquisition of shipping tonnage for the current Five-Year Plan ending 1978-79.

*The Economic Times*, September 23

The apprehension that the placement of Russian vessels at Indian ports for the carriage of export cargo to the US Atlantic ports might hurt Indian shipping interests is slowly coming true.

*The Economic Times*, September 18

India, which withdrew from the

West Coast of India-US Atlantic Shipping Conference in protest against a general increase in freight may have to form a new conference with the Russian line as a member in this important trade route to safeguard its shipping interest against the latest Russian intrusion.

*Business Standard*, September 21

The management of India Tourism Development Corporation has expressed its concern over the poor rate of return on its capital employed in the vicinity of Rs 26 crores. The return is merely 2 to 3 per cent.

*The Economic Times*, September 21

The India Tourism Development Corporation (ITDC) plans to start at least six new hotels during the Fifth Plan Period...

*Business Standard*, September 20

Collections from land revenue and agricultural income-tax together constituted only 6.2 per cent of tax receipts of state governments in 1975-76, according to the latest annual report of the Reserve Bank.

*The Times of India*, September 17

Maharashtra and Madhya Pradesh today urged the Centre to reduce the prices of inputs to increase production in the farm sector.

*The Times of India*, September 23

The Union Agriculture Ministry has announced the details of the scheme under which the manufacturers of phosphatic fertilisers are to be given a subsidy of Rs 1,250 per tonne.

*Financial Express*, September 19

Brahmins constitute the largest ethnic group involved in the purchase of land from the tribals in Bastar after advancing money or selling provisions on credit. This is revealed in a study on land alienation among the tribals of Bastar.

*The Hindustan Times*, September 20

Central government employees numbering three million could lose two instalments of dearness allowance in terms of the pay commission report.

*Business Standard*, September 17

Over 1,500,000 people in Assam are unemployed, according to the fifth report of the Employment Review Committee which was submitted to the Assam Assembly recently.

*The Statesman*, September 22

The defence minister, Mr Bansi Lal, today said that the army would be equipped with the latest and most sophisticated weapons as peace could be maintained only if the nation was vigilant and strong.

*The Times of India*, September 21

Admiral N N Anelko, Deputy Commander-in-Chief of the Soviet Navy, inspected INS Himgiri which is now in the Black Sea port of Odessa paying a four-day goodwill visit, the first by an Indian naval vessel in 12 years.

*Indian Express*, September 21

Legislation arming the Railway Protection Force with wider powers to enable proper investigation of offences is in the final stages of drafting.

*The Times of India*, September 17

Mr S S Jog, Deputy Inspector-General of Police, has taken over last week as joint secretary of the Home Department of Maharashtra Government.

*Indian Express*, September 21

The CPI will join hands with progressive and democratic parties on one platform to work for the success of the 20-point programme and fight against the nefarious designs of "imperialist and internal reactionaries", CPI general secretary Rajeshwar Rao said today.

*Patriot*, September 20

The nation was grateful to the Prime Minister who had inculcated a distinctive qualitative change in our national life by earnestly implementing the 20-point programme, observed the Jagad-guru Shankaracharya of Sringeri Peetha in a recent interview with AIR.

*Deccan Herald*, September 17

Prime Minister Indira Gandhi said today she got a bit embarrassed when the 20-point programme was talked about. ... Somehow it became like a mantra.

*Indian Express*, September 22

The speaker, Mr B M Mohanty, announced on the opening day of the monsoon session of the Orissa Vidhan Sabha yesterday that 12 members had joined the Congress legislature party. Mr Mohanty said he had received "intimation" that Mr Banka Bihari Das, former minister for revenue, had ceased to be a member of the Congress party.

*The Times of India*, September 17

Mr A N Naik, leader of the Congress opposition in the Goa assembly, has claimed here [Panaji] that the ruling Maharashtra Gomantak Party will soon lose the support of eight MLAs.

*The Times of India*, September 18

Mr Khyomo Lotha, a Rajya Sabha member from Nagaland belonging to the United Democratic Front, has joined the Congress.

*The Times of India*, September 20

Gurnam Singh group of Akali Dal has decided to join Congress in order to better serve the interests of the country as a whole and the Sikhs in particular.

*Patriot*, September 21

Prof [Igor] Kirpotousky, [eminent Russian medical scientist of the People's Friendship University, Moscow] speaking at a function got up in his honour by Vallabh Patel Institute, hailed the advances made by India in family planning, which he termed as "population regulation".

*Deccan Herald*, September 18

The Union Government today announced a comprehensive scheme for immediate relief of Rs 5,000 per accou- tor in all cases where death may occur after sterilisation and for special payment in cases of post-operative complications.

*Free Press Journal*, September 2

A mill worker having just one daughter got himself sterilised a month ago because the Prime Minister, Mrs Indira Gandhi, was the only daughter of Jawaharlal Nehru.

*The Times of India*, September 17



# Recessionary Winds

Hansavivek

**KESORAM INDUSTRIES'** profit margins have been under severe pressure owing to a combination of several adverse factors. Equity dividend — lowered by 4 points, to 8 per cent, on an enlarged capital — is not fully covered though there is no tax liability (which was Rs 60 lakhs previously). Total distribution is expected to be wholly exempt from tax. Auditors were paid Rs 1,37,163 for 'other services' and by way of reimbursement of expenses, apart from their fee of Rs one lakh. Power rationing and unscheduled load-shedding had an adverse effect on the production and profitability of various sections. There have been, moreover, steep increases in the prices of coal, some items of stores, colours and chemicals, power rates, and basic wages. There was very poor offtake of cloth and yarn which, in turn, led to accumulation of stocks and steep reduction in prices. There has also been

a sharp rise in the prices of cotton, and even its availability has become a problem. The rayon and transparent paper sections had to contend with a strike till July 19, 1975. The directors say that abrupt and long closure of the plant has caused so extensive a damage that full production of good quality yarn has not been achieved even now. Meanwhile, prices have been falling steadily. Recently, government has allowed limited export of rayon yarn, which may help stabilise prices in the home market. Demand for transparent paper has been adversely affected and production had to be curtailed. Some quantity is being exported. Production of cast iron pipes and fittings was lower owing to lack of orders, especially for the bigger sizes of pipes. Exports, however, increased from Rs 25 lakhs to Rs 62 lakhs, and new markets are being explored. Also, new items developed. The refractory section suffered for

want of adequate orders, but the directors hope that the working will somewhat improve. The plant needs extensive renovation and modernisation, but this will be undertaken only when the market conditions improve. The performance of the cement section has been very satisfactory, with production having exceeded licensed capacity after removal of the power cut. The company complains that APSEB has doubled the power tariff and that this has increased power charges to the extent of Rs 66 lakhs per annum, and has more or less offset the advantage of a higher price of cement. The company has obtained a 'letter of intent' for doubling capacity of the Basantnagar plant to 9 lakh tonnes. But government has imposed certain conditions about finance. The management is discussing the matter with the authorities. Meanwhile, the company has found Morak in Rajasthan as the suitable location for the proposed new cement project. A new company is proposed to be formed to take up this project. The subsidiary, Bharat General and Textile, has obtained a 'letter of

## The Week's Companies

(Rs in Lakhs)

	Kesoram		Mohan Meakin		Reckitt and Colman		Chase Bright	
	Latest Year 31-3-76	Last Year 31-3-75	Latest Year 31-3-76	Last Year 31-3-75	Latest Year* 3-1-76	Last Year† 4-1-75	Latest Year 31-3-76	Last Year 31-3-75
Paid-up Capital	570	420	425	425	250	250	60	60
Reserves	975	1097	535	571	170	153	33	17
Borrowings	953	987	452	423	166	157	137	185
of which Term borrowings	330	368	—	—	—	—	—	—
Gross fixed assets	3009	2941	1138	1084	438	422	118	101
Net fixed assets	1326	1385	557	598	278	286	83	69
Investments	50	50	52	48	2	2	25	24
Current liabilities	646	610	442	474	199	200	69	58
Current assets	1769	1679	1245	1247	498	469	172	241
Stocks	1279	1183	871	835	216	266	83	138
Book debts	464	470	310	353	258	190	84	100
Net sales	3993	3889	2244	2271	1017	989	287	376
Other income	51	42	31	20	16	28	22	11
Raw material costs	1373	1299	431	495	463	417	199	211
Wages	911	917	307	266	250	263	20	29
Interests	124	127	58	57	29	22	27	27
Gross profit(+)/loss(-)	191	259	218	355	114	135	-12	16
Depreciation provision	133	130	76	78	17	21	4	4
Tax provision	—	60	95	171	62	71	—	3
Net profit(+)/loss(-)	58	69	47	106	35	43	-16	9
Development rebate provision	17	—	3	16	—	1	—	1
Transfer to reserves	—	22	—	39	3	26	—	8
Dividend								
Amount	P 11 E 36	11 36	P — E 51	— 51	P — E 32	— 16	P — E —	— —
Rate (per cent)	P 9.3&10 E 8	9.3&10 12	P — E 12	— 12	P — E 12.50	— 6.25	P — E —	— —
Cover (times)	0.83	1.61	0.86	1.76	1.09	2.62	—	—
Ratios (per cent)								
Gross profit/sales	4.78	6.66	9.71	15.63	11.21	13.65	—	4.28
Net profit/capital employed	2.32	2.75	3.33	4.47	5.97	7.68	—	3.43
Inventories/sales	32.03	30.42	38.81	36.77	21.23	26.89	28.92	57.26
Wages/sales	22.82	23.58	13.68	11.71	24.58	26.59	6.96	7.71



intent' for setting up a solvent extraction plant at Malkapur in Maharashtra with an annual capacity of 50,000 tonnes in terms of oilcake. The application of the other subsidiary, Hindustan Heavy Chemicals, for expansion of its caustic soda/chlorine plant from 5,500 tonnes to 16,500 tonnes was rejected by government.

**MOHAN MEAKIN BREWERIES'** experiment in cultivation of hops, in Kashmir and Himachal Pradesh, has been successful and it is now undertaking cultivation on a commercial scale. An important ingredient of beer, hops are at present wholly imported. The company is also expanding its activities. It has entered into a technical collaboration with a party for bottling Indian-made foreign liquor in Bhutan. The bottling plant is expected to be in operation before the end of the current year. In association with a local party, the company is also setting up a glass bottle factory in Fiji — for which purpose a new company 'Mohan Fiji Glass Manufacturing' has been registered in that country. Meanwhile, the company's distillery at Solan Brewery is almost complete and will be commissioned on receipt of 'carry on business' licence. The subsidiary, Mysore Fruit Products, has also obtained an exise licence from Karnataka government for setting up a distillery at Bangalore. As it will take some time to establish a distillery, the management intends to start bottling IMFL products there. MMB's working results for 1975-76 have been poor, with margins halved despite a mere fractional decline in sales. The diminution of profits is attributed to sluggish demand in the market and rise in costs. Prices of certain products had to be reduced. Dividend of 12 per cent is being repeated, but is not fully covered by earnings. The current year holds out promise of improved results. Sales in the first quarter have registered a 33 per cent rise and production has been stepped up in line with the market demand. The company increased export sales, from Rs 16 lakhs to Rs 28 lakhs last year, but complains that it had to incur losses owing to inadequate incentives. Its own expenditure in foreign currency was over Rs 14 lakhs. The auditors were paid Rs 24,911 by way of reimbursement of expenses and for other services, apart from their fee of Rs 80,000.

**RECKITT AND COLMAN OF INDIA** — engaged in manufacture of house-

hold products, polishes and compositions, foods, pharmaceuticals and toiletries — proposes to diversify into the business of chemical engineers and of manufacture of chemicals, chemical materials, salts and acids. During 1975, the company experienced contraction of margins. Although sales were slightly higher than in the preceding 14 months despite difficult trading conditions, gross profit was considerably lower. The directors attribute this outcome to cost inflation and reluctance of the authorities to allow reasonable price increases for pharmaceutical products. Dividend has been stepped up from 6.25 per cent to 12.50 per cent which, however, is barely covered by earnings. Total capital expenditure during the year amounted to Rs 9 lakhs — a substantial part of which was incurred on replacements and balancing equipment. The directors hope that the recessionary trends will soon recede.

**CHASE BRIGHT** has suffered a severe setback owing to recession of demand and erosion of margins. Production was only modestly lower, but sales declined sharply, and the outcome was a net loss of Rs 16 lakhs against a net profit of Rs 9 lakhs earned previously. The company added one more centreless bar-turning machine and diesel generating sets, together costing about Rs 16 lakhs. The management hopes that these additions will to some extent offset the difficulties created by the power cut and enable the company to produce qualities which are in greater demand. Meanwhile, production, and sales in home and overseas markets have started looking up in the current year. The subsidiary, Indian Bright Steel, was also hit hard by the recession last year and is now showing some improvement. The project of the other subsidiary, Chase Overseas, for putting up a bright bar plant at Aurangabad, has been delayed because of the unfavourable economic climate in the country and escalation of costs. Its application for additional financial aid is being considered by MSFC. The management hopes that the company

will be able to complete its project by March next.

**MACHINERY MANUFACTURERS CORPORATION**, which has been successful in bringing down steadily the cumulative loss of Rs 143 lakhs to Rs 38 lakhs, expects to wipe out this completely with the profits of the current year ending March next. In fact, the management even hopes that the company will be able to make a beginning in clearing the arrears of preferential dividends, which at the end of 1975-76 stood at Rs 22 lakhs. The company expects to start production of the new Tandem card and raise the speed-frame speed by 20 per cent through redesigning and development during the current financial year. It also expects to begin production of the new HP carding engine by the end of 1977. The company has also planned a project for manufacture of ring frames in collaboration with a West European firm. This project, when fully implemented, will enable the company to offer a more comprehensive line of equipment to domestic and overseas customers and to protect it during the periodical declines in the demand for carding engines.

**STRETCH FIBRES (INDIA)** has turned out improved results for the year ended March 1976, with sales rising from Rs 3.71 crores to Rs 5.96 crores, followed by a turnaround from a trading loss of Rs 13 lakhs to a trading profit of Rs 48 lakhs. The surplus and some write-backs have been utilised to wipe off the accumulated deficit of Rs 23 lakhs and to provide for arrears of depreciation of Rs 27 lakhs for 1973-74. However, depreciation on fixed assets for the subsequent two years, amounting to Rs 42 lakhs, has yet to be provided for. These results followed increase in production, from 152 tonnes to 224 tonnes. A substantial part of the imported machinery required for the polycaprolactum project has arrived and the project is expected to be completed in early 1977.

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## WORLD TRADE AND PAYMENTS

## Growing Disorder

R H Patil

THE last five years have been perhaps the most trying period for the world economy in the last three decades. It witnessed the breakdown of the Bretton Woods system that had facilitated the integration of the world economy, despite the slow dismantling of barriers to international trade. The period saw the undermining of the supremacy of the US dollar and has been characterised by disorderly floating of currencies and movements of exchange rates. The last five years have also witnessed a sharp increase in the unit values of trade, the most severe recession in four decades, high levels of unemployment and entrenchment of high inflation rates in most parts of the world.

Though the gloom cast by the recent recession has not entirely disappeared, some rays of hope can be seen on the horizon. According to the latest Annual Report of the International Monetary Fund, by mid-1976 the world economy was completing the first year of recovery from the recession, with production in the industrial countries "again expanding at a satisfactory pace" and rates of inflation "considerably below those experienced in 1974 and the first half of 1975". But despite continued high levels of unemployment and underutilisation of productive capacity, the upward trend in output is already creating "widespread concern about the risk of renewed acceleration of price increases". A number of developed countries have already thought it appropriate to tone down fiscal stimulants so as to keep inflationary pressures within limits.

No doubt, inflation in the industrial countries as a whole has slowed down from an annual rate of 13.5 per cent in the first half of 1974 to 8.5 per cent in the second half of 1975 and to 7 per cent in the first half of 1976, but the last-mentioned rate is still twice the average annual rate of 3.4 per cent for the period 1960-70. Price increases in Italy and the UK, at 17 per cent and 13 per cent, respectively, in the first half of 1976 are still very high; however, the rate of price rise is comparatively low at 3 per cent in West Germany, 4.5 per cent in the US and 7.5 per cent in Japan. In the non-oil-

exporting developing countries the increase in average consumer prices was high at 32 per cent in 1974 and 30 per cent in 1975. Thus unabated inflation, lower levels of economic activity and high levels of unemployment are the main problems faced by the majority of countries on the domestic front.

On the external front the situation is highly fluid. The rate of growth of the volume of world trade rose from 9.5 per cent in 1972 to 13.5 per cent in 1973, but fell to 6 per cent in 1974. In 1975 the volume of trade actually declined by 4.5 per cent. With the revival of industrial activity in the developed countries and continued expansion of imports of the oil-exporting countries, world trade has picked up once again in 1976. Prices of primary products have responded to the rise in demand. By mid-1976 commodity prices expressed in SDR terms had risen by over one-fifth over their end-1975 level. A continued upsurge in economic activity over a large part of the world would lead to increase in demand for petroleum thereby strengthening the bargaining power of the oil exporters, a majority of whom are already asking for a price increase. One could, therefore, expect a rise in commodity prices again after a lag of about three years. The main producers of commodities like copper and iron ore have given indications of trying to work out OPEC-type arrangements. The synchronisation of the economic recovery in most of the developed countries, in contrast to the earlier divergent cyclical patterns particularly as between North America and Western Europe, is likely to accentuate the upward trend in prices of most internationally traded goods. It also means that the recessionary phase of the cycle, when it comes, will be especially severe.

The pattern of world trade and payments contains inherently de-stabilising factors. The trade balance of the industrial countries turned from a deficit of \$ 10.5 billion in 1974 to a massive surplus of \$ 20.9 billion in 1975. As regards the non-oil primary producing countries, their trade deficit increased from \$ 11.4 billion in 1973 to \$ 41.4 billion in 1974 and further to \$ 48

billion in 1975. The total current deficit of these countries increased sharply from \$ 10 billion in 1973 to \$ 37 billion in 1975. The surplus trade balance of the major oil exporters increased from \$ 18.9 billion in 1973 to \$ 82.3 billion in 1974; in 1975, however, it declined to \$ 50.8 billion due, first, to a spurt in imports and, second, due to the weakness in the oil export markets. As the economic recovery continues, demand for oil as well as other primary commodities is bound to increase in the immediate future. According to the IMF's forecasts, the current account surplus of the major oil exporters will increase from \$ 35 billion in 1975 to \$ 40 billion in 1976 while that of the industrial countries will decline sharply from \$ 19 billion in 1975 to \$ 3 billion in 1976. The IMF expects the current account deficit of all the less developed countries taken together to decline during the period by \$ 5 billion. The prospects for 1977 appear to be rather disturbing. One may expect the price explosion of 1972 and the early part of 1973 to repeat itself in 1977. The relatively weaker currencies of Western Europe, *viz.* the sterling, the Italian lira and the French franc as well as the US dollar would come under heavy pressure. The oil exporters' attempt to force oil prices up again may result in deepening the crisis as these countries' capacity to absorb much higher levels of imports is limited.

The seeds of impending crisis can also be seen in the pattern of financing of the deficit by the less developed countries. Their reliance on borrowings from private foreign banks increased sharply from \$ 0.4 billion in 1970 to \$ 3.7 billion in 1973, \$ 7.0 billion in 1974 and \$ 8.5 billion in 1975. Since such borrowings are generally of a short-term nature, repayment will pose a problem for a number of countries. The IMF Report points to the increased vulnerability of many of these countries to an adverse shift in their export earnings, especially because inflation has substantially eroded the real value of their external reserves. The banks that have lent to these countries are, therefore, running a great risk, the seriousness of which will be known only when a crisis materialises.

A close reading of the IMF Report leads one to believe that IMF has not only reconciled itself to the 'dirty' float but is trying to bring out the plus



points of this arrangement. In the past the IMF had consistently opposed any major deviations from the Bretton Woods system and dismissed all suggestions favouring greater flexibility of exchange rates. Some of the IMF's critics had felt that since the sheet-anchor of the IMF was the fixed exchange rates system, any deviation from this orthodoxy was bound to undermine the organisation — as such a step would do away with the need for conditional finance for meeting so-called 'temporary' balance of payments difficulties. But ironically, the IMF has reported record business in the last two years. As the report points out, members' purchases amounted to a record SDR 4.7 billion during the calendar year 1975 and came to more than SDR 4.9 billion in the first half of 1976 alone" (p 3). The discussion on day-to-day and week-to-week fluctuations of exchange rates in the Report brings out certain interesting facts. It is pointed out that there was a tendency towards smaller day-to-day and week-to-week fluctuations in the last year by comparison with the previous two years. Similarly, though "the exchange value of currencies of the major industrial countries continued to exhibit noticeable swings lasting over a period of a few months or even quarters, the magnitude of these swings tended to be somewhat less over the past year than in the previous two years of floating" (p 28).

Even ardent supporters of a fully flexible exchange rate regime have to admit that the swings in the exchange rates of major currencies have been highly de-stabilising in the last three years. These swings do not generally reflect the basic economic situation of these countries and can be explained only in terms of the working of strong speculative forces in the exchange market. Unless the magnitude of these swings is reduced they are bound to adversely affect the economies of individual economies as well as the growth of world trade. The role of multinational corporations in speculative transactions on the markets needs to be seriously looked into.

The floating regime, it may be claimed by its supporters, has not been given a fair trial in the last three years. Unless governments seriously attempt to keep their own houses in order, the world economy would continue to be subjected to instability and disorder. Recently developments, especially in the industrial countries, have also exposed the serious lacunae in economic

theory and the tools recommended by it for tackling situations in which high inflation rates accompany large-scale under-utilisations of productive capacity and labour force. Economic policy-makers cannot, of course, afford to wait for economists to come up with new

solutions. They need to pursue vigorously policies for keeping inflation rates within limits. They also need to resist the temptation to try to export inflation to other countries just because the floating exchange rate regime makes that so easily possible.

## BIHAR FLOODS

### Familiar Patterns

Arun Sinha

THE bureaucrats of Bihar have always sought *ad hoc* solutions to that annual visitation, the floods. They do not think about the floods once they have receded. Relief has thus become a ritual too, far more important than prevention. And there is only one way of preventing floods known to experts in this part of the country — embankments. But embankments have proved an unreliable defence against floods. There is no embankment in the state which has not been breached more than once.

Embankments have one big flaw; they protect a larger population at the cost of a smaller one. Chief Minister Jagannath Mishra has himself said that "if we protected 11 lakh people by the Kosi embankment, we have driven 4 lakh others into regular floods". And if every now and then embankments are breached and floods assail even the 'protected' areas, of what use are they? The recurrent tragedies caused by the breaching of embankments should have by now touched off some rethinking on flood protection. Unfortunately, conservative ideas continue to rule this branch of civil engineering and all the proposed expenditure on flood protection in the Fifth Plan in Bihar is to be incurred on embankments.

In these circumstances, it is natural that relief operations become all-important. But here the state government has been complaining of lack of funds. After the Prime Minister's aerial survey of the flooded areas, the chief minister submitted to her a memorandum demanding Rs 6 crores for relief. The memorandum said: "The state government is under severe financial constraint; it would therefore find it difficult to meet the requirements of funds for both relief operations as well as repair and restoration of the roads, canals, embankments, etc, from its meagre resources without grievous dislocation of the Plan. There is a provision of Rs 4.61

crores in the state's non-Plan budget as per the Sixth Finance Commission's stipulation. It is estimated that we shall need another Rs 10 crores to meet the requirements of relief operations..."

The salient feature of this year's relief operations in Bihar has been the greater dependence on the Centre for funds and on the armed forces for relief operations. Previously, the army would be called out at a very late stage of the floods, i.e., after the state bureaucratic machinery had tried and failed. But in recent years the tendency has been to summon the jawans at the very first news of floods in the state. According to official figures, as many as 700 army engineers worked for many days to restore several services disrupted by the floods. As many as eight, and on one day 12, heavy transport aircraft of the Indian Air Force brought food and medicines from Delhi, Calcutta, Chandigarh and other places. Six IAF helicopters, and for some days as many as a dozen, flew over the waterlogged villages, dropping packets of food. More than 100 powered armoured boats worked almost continuously to rescue the marooned population and take relief materials to them. The army rescuers also used countless ordinary boats airlifted from various command areas by transport aircraft. When on the Grand Trunk Road two bridges over the hilly rivers Morhar and Leela-Jan gave way, it was again the army which rushed two 'bailey bridges' from Allahabad, using as many as 95 trucks.

How much the state government has grown to depend on servicemen to fight floods is seen from the action that usually follows the receipt of any message for help from the districts. The relief commissioner just picks up the telephone to pass on the information to the army or air force. He would say, for instance, "The district magistrate of Bhagalpur informs me that a large number of villagers have taken shelter



on the Bihpur-Kursela road and the railway station. They are pestering the officials for food. Have something air-dropped in the area immediately, please".

All the 85 houses are in a shambles. The flood has wrecked the harijan busti. It is littered with thatches, bamboo sticks, tiles, mud clods and all that constitute the poor man's building materials. A few thatch roofs have been carried away to a corner of a nearby field, which is still waterlogged, four days after the floods have receded from the busti.

It is a fine morning and the harijan busti, a part of Manora village in Patna district, just on the southern bank of Punpun, is fully awake. The people do not have any place to sleep. Every man is busy reconstructing his house, gathering bamboo, tiles, rotten thatch and broken bricks. Ramlagan Chamar, whose brick-walled house has developed wide cracks, is packing the gaps with mud. Kuldeep Das and his brothers, eight of whose houses have collapsed, are tying together bamboo sticks with strings salvaged from the floodwaters. Their wives and children lend a helping hand. Bhavsagar Musahar, who lived on the edge of the Punpun's bank, cannot find even the debris of his house. To someone who looks like an irrigation department official, who has paused to look around the ravaged busti, Bhavsagar appeals "Arrange a tent for me, *huzur*. You see, it's going to rain. I have seven children, *huzur*." As the stranger shrugs his shoulders to express helplessness, the clouds rumble and it starts drizzling. Bhavsagar scampers under a neem tree.

The rain begins to fall; a few people take shelter in the house of Ramlagan Chamar who, after seeing them come, leaves his crack-filling work and comes out into the outer verandah. Stretching his mud-coated right hand he feels the rain on the back of his palm and speaks in Magahi to nobody in particular: "*Ye bar parlaye atte ka ho?*" (Is 'pralay'—day of judgment—scheduled for this year or what?). The remark attracts further observations. Sukhu, the young labourer who had virtually starved for the first three days of the flood, expresses agony: "It seems that Hathiya rains would be heavy. Don't you see it has started much before its usual time? God knows where we will get any work". At this, Jhansi says that the 'thekedar' for the Punpun embankment repairs had sent word to the busti labourers offering work at five rupees a day.

The rains have stopped. Men are getting back to the reconstruction work. Sukhu and his brother Mukhu are laying the thatch over a bamboo-net to make the roof. Dark faces can camouflage misery, but mouths do open. "On September 17 afternoon, around 2 p.m., a stampede started in the harijan busti on receipt of the news that a high flood was invading from the south. The flood was within sight. Some people ran to the Punpun railway station [one km away] and demanded boats from the railway officials. Nobody listened to them. But, and we still thank God for that, meanwhile a goods train arrived at the station loaded with five or six boats. The boats were however being sent to the people of Masaurhi [15 km south of Manora] which had already been flooded by then. A few minutes later, when the goods train didn't proceed, we went to enquire whether it was still possible for the officials to unload at least a single boat. The head clerk told us that the train could not go to Masaurhi as the floods had damaged the rail track ahead. After a literate man of our busti signed some papers, a boat was allotted to us".

Only a boat was given; no rudder and no boatman. But it did not matter. Two young men began rowing with the help of lathis. Of about 400 people in the busti, a sizeable number had already escaped by a raised walkway to the railway line. It was 3 p.m. and the flood was touching the southern fringe of the busti whose northern side was already threatened by the swollen Punpun. The boat carried one group of people after another to the safety of the Punpun railway station. When the boat reached the busti for yet another trip round about 5 p.m., water had entered the tenements and levelled up with Punpun. From then on, for five days the waters of the Punpun were indistinguishable from the flood waters and the busti became a half-inundated island. That was the last trip undertaken by the boat. Twenty-five persons were still left in the busti. They got on to their roofs, barring two, including an old man, who climbed up a tree. They sat there the whole night, crying, sleepless, watching the ferocious waves of a sea which seemed to have no shores.

The people of the busti, who had taken shelter at the Punpun station, were worried about the fate of these 25 persons throughout the night. Early in the morning, the two brave young men set out for the busti. But as they were rowing past village Allauddinchak, midway between the station and the

busti, a group of big landowners of the village held them up and took away the boat. The young men appealed to their conscience but to no avail. The marooned harijans were rescued later in the day by another boat.

Interestingly the same landowners of Allauddinchak arrived at the railway station to ask some of the labourers to help in salvaging grains from their flooded 'kothis' (granaries). The labourers were angry over the boat incident but starvation and militancy cannot go together. Mukhdeo Das of Manora's harijan busti waded through deep waters to salvage about 25 maunds of rice stocked in the kothi of Brajnandan Singh, the biggest landlord of the area belonging to the dominant landowning caste, Awadhia Kurmi. Mukhdeo got as wages for a day's tiring labour five seers of rice from the half-rotten bags.

On September 25, the harijans came back to find their busti in ruins. They had no grains in store, and no source of taking grain on loan either for almost all the landowners of Manora had lost their stocks and standing paddy crops. Do not helicopters come here? "Yes, one flew over here the day we returned", says Ramlagan Chamar, "but it dropped food packets only at the landowners' brickhouses in the village proper. In ten days, the 400 harijans of Manora had been given only one bag of gram which makes the average supply per head a mere 25 grams. On September 26, some harijans were given about one-and-a-half bags of wheat flour from the relief centre. On the way to the village, some Awadhia Kurmi landowners' men snatched away the wheat flour, taunting the harijans, "harijans do not eat flour, only sattu and grams". An eight-year-old child had gone to a relief centre opened at Punpun Dharmashala and when he asked for food, he was given a slap. One day, the 'karmachari', the lowest revenue functionary, brought a boatful of relief materials. Once the materials had been unloaded, he proceeded to the cluster of landowners' houses. Later a relief train brings bread, biscuits, etc., to Punpun station. The food is kept on the platform where a large crowd is staring at it. Their eyes betray an impulse to pounce on the stocks and run away with some bread. Some of the men angrily shout: "Are these loaves of bread to be given to us or to the mukhivas and kisans?" The policeman, who is guarding the stock smiles a mixed smile of understanding and helplessness.



## WEST ASIA

## Soviet Union on the Sidelines

Surendra Bhutani

ACTORS in international relations prefer to deal with optimal conditions: low risks, minimum costs and high potential benefits. The problem is that these conditions seldom obtain. International relations in general have become increasingly complex, and in specific adversary relation there are risks of crises and, ultimately, risks of war. As a superpower, the Soviet Union's position on regional conflicts is inevitably linked, less with its relationships with the parties directly involved or its intentions *vis-a-vis* the region in question, than with considerations of global strategy. The broader Soviet foreign policy perspective indeed provides this explanation for the two major components of the Soviet stand on the Arab-Israeli conflict: on the one hand, the constant desire to have a say in every agreement or settlement that may be reached; and on the other, the influence of extraneous factors and trends that forces Moscow to adopt a defensive position or more over to the offensive. It is these outside influences which explain the frequent contradictions in the implementation of Soviet policies.

The October War of 1973 and its immediate consequences confirmed that the United States and the Soviet Union were the chief external factors determining the future of the Arab-Israeli conflict. Prior to the October War, Soviet interests might best have been served by a partial settlement in West Asia (that is, partial withdrawal of Israeli forces in Sinai and reopening of the Suez Canal); even in the wake of the war, there were signs that the Soviet Union preferred a broad settlement between Israel and the confronting Arab countries. Evidence for this might be seen in Soviet actions since the end of the war. Despite the fact that both the six-point ceasefire agreement of November 11, 1973 and the Israeli-Egyptian disengagement of forces agreement were both directly and openly associated with the United States, the Soviet Union did nothing to obstruct either. Nor did it attempt to obstruct the negotiations and plans for further agreements; indeed in January 1974 it reportedly tried to persuade Syria too to participate in the Geneva conference.

Such a preference for a peace set-

tlement over a partial agreement seemed to be based upon two assumptions. The first was that a continuing conflict (such as, for example, the 'No Peace No War' situation prior to October 1973) presented too great a risk of war and therefore of superpower confrontation. Secondly, the Soviet Union could best preserve its interests (that is, its presence in the area) in conditions of peace. The assumption was that since no settlement was likely to be perceived by the parties involved as permanent — in the sense of eliminating the need for allies or arms — the Soviet Union would remain the Arabs' principal supplier of arms.

But once the American influence gained momentum we see a gradual decline of Soviet power in the Arab East. This resulted in increasing coolness in Soviet-Egyptian relations. There were good reasons for it. First, President Sadat felt deeply humiliated by Soviet "arrogance". Ideologically, Sadat is a restrained Egyptian rather than a pan-Arabist like Gamal Abdul Nasser. Sadat was also convinced that the crisis-ridden Egyptian economy had to be revived and this could only be done by vast inputs of Arab aid and Western credits and technology; and since Sadat's aid-givers are anti-Soviet he has had to adopt an anti-Soviet stand. Finally, Sadat was convinced that only the United States could "pressurise" Israel to vacate the occupied territories; in Egypt's view, Moscow has scant leverage in this regard. Thus the abrogation of the friendship treaty with the Soviet Union, a treaty intended for fifteen years which could not last more than five years.

The fall-out of Egyptian-Soviet hostility is visible in Syrian-Soviet relations also. Egypt and Iraq are potentially the two strongest Arab states, and historically threaten the weaker Syria. Initially Syria was less confident than Egypt that the United States would push Israel back. But with the intensification of Syrian involvement in the Lebanese crisis, Syria has started depending on Washington and Tel Aviv. Once Syria indirectly acknowledged the Israeli stake in the Lebanese crisis, the Syrian refusal to negotiate with Israel lost its rationale. Now the Soviet Union seems to be gradually losing whatever influ-

ence it commanded in Damascus: the Syrian leadership has been pursuing policies which do not always accord with Soviet interests in the Arab East.

Thus, we see that the Soviet Union has been the loser in the aftermath of the October War. While the US continues to pay lip service to the idea of including the Soviet Union in any final settlement of the problem it has in practice excluded the Soviet Union, and neither the US nor the confronting Arab countries see any reason to bring the Soviet Union back. To some extent the Soviet Union itself is responsible for the setback; it had hoped that Kissinger's step-by-step diplomacy would stall, and the Arabs would have no alternative but to return to Geneva. But with the "Arabising" of the Lebanese crisis, the Arabs have lost interest in the Arab-Israeli conflict, which has led to the Soviet Union losing influence in the area.

In other words, the Soviet Union has been placed on the sidelines by the Arab-Israeli settlement process. The Soviet Union now has two options: It can try to demonstrate its continuing relevance in the area by obstructing a US sponsored settlement; or it can shift its emphasis from the Arab-Israeli conflict to other arenas. At the moment, it seems to be doing both. It is maintaining its dialogue with the Arab rejectionists; and it is also reinforcing its naval power in the region, thus seeking a basis for its presence that will be free of the uncertainties of the Arab-Israeli conflict or the goodwill of unreliable allies.

Will the Soviet Union recoup its losses? For the time being, it cannot counter the petrodollar held by the conservative Arabs. But Soviet ideology, massive arms investment, intra-Arab dissensions, and the Soviet ruling elite's optimistic sense of history, and more importantly, Arab radical nationalism, are the factors which favour Moscow. All these indicate that it can still play a superpower role in the Arab-Israeli conflict. There is also another factor; the Soviet involvement in the area has been based on low risks. Until or unless the Soviet policy-makers change this low-risk perception, it is unlikely the Soviet Union would advance and consolidate its position in the Arab East for a long time to come. Detente has certainly affected Soviet policy and has made it pay a price in the area. The opponents of detente in Kremlin must be questioning Brezhnev in this regard.



# REVIEW OF

# AGRICULTURE

September 1976

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# Price Support Is All

IT is not at all difficult to identify the concerns which dominate the discussions this week between the Union Agriculture Minister and the state chief ministers on the price and procurement policy for the kharif season. The thought uppermost in the minds of the chief ministers is that prices of foodgrains must not be allowed to fall at any cost. As it is, the so-called procurement operations have in effect become price support operations, with the procurement price being accepted without any question by anyone as the support price. Despite the assurances of the Union Agriculture Minister that the government will buy all the foodgrains that are offered at the procurement prices, the governments of the surplus food producing states do not want to depend entirely on the Food Corporation to maintain prices; they are also keen to use the occasion to try to enlarge the role of private trade in foodgrains.

Hence, for instance, the pressure from Andhra Pradesh for the formation of an enlarged southern rice zone consisting of, besides itself, Karnataka, Kerala and Tamil Nadu. The formation of such a zone will make it possible for private trade, whose activities are now restricted to within state boundaries, to buy, sell and move foodgrains freely within the zone. The attraction of such an arrangement for Andhra Pradesh is obvious. It will help raise the price for Andhra's surplus rice; it will also enlarge the scope of operations of the rice millers who are such a powerful force in the state. The same considerations hold to an extent for Tamil Nadu and Karnataka. The only opposition to the proposal may thus come from Kerala, but it too may be persuaded to agree if the Centre guarantees it sufficient supplies of rice to keep the public distribution system going in that state. For the Centre too an enlarged southern rice zone has its attractions since it will ease the burden on the Food Corporation of making purchases to support prices.

The discussion on the enlarged rice zone in the south brings out how issues in food policy are being viewed almost exclusively from the standpoint of providing price support. It is not surprising, therefore, that little attention is being paid to the fact that, except in the areas which are under statutory rationing, the public distribution system for foodgrains has been virtually dismantled. This is reflected in the sharp decline in the offtake of foodgrains through the public distribution system. In the first seven months of 1976 the offtake was just 3.5 mn tonnes compared to 5.8 mn tonnes in the corresponding period of 1975. Apparently no significance is attached to this decline which is regarded simply as following from the relatively stable prices of foodgrains in the open market.

We have been here before. In an earlier period, the offtake of foodgrains through the public distribution system declined from a peak of 14.1 mn tonnes in 1966-67 to 7.7 mn tonnes in 1971-72. The consequences of this whittling down of the public distribution system were seen in the latter year when it was discovered that the substantial stocks of foodgrains then available with the government were of no avail in checking the rising trend in prices which had by then set in. It will be recalled that in a panic the Food Corporation had, for some months beginning from January 1972, tried to check the rise in foodgrain prices through so-called open market sales to private traders. Of course, the traders were overjoyed at this heaven-sent accretion to the stocks available to them for speculation and profiteering!

The absence of a long-term perspective on food policy is best brought out by the recent talk of export of foodgrains. Speaking in Bangalore earlier this month, the Union Agriculture Minister is reported to have said that the government may have to arrange for the export of a part of the foodgrains purchased by it as a price support measure. The implied reasoning evidently is that the quantities of foodgrains that have to be bought in years of good agricultural production are likely to be in excess of the buffer stocks required to keep prices stable in years of poor production and that for the excess quantities export markets will have to be found since within the country while large numbers of people — in fact a majority of the population — are underfed and need food desperately, they are too poor and do not have the incomes or purchasing power to buy the foodgrains at the prices which the government guarantees the farmers. One has only to put it like this to see the topsy-turviness of the present approach to food policy. It is the objective of the Five-Year Plans, the 20-Point Programme as well as other Programmes to improve the lot of the poor by creating employment and raising incomes. The incomes of the poor are largely, or even mostly, spent on food. Today, we have the food. But instead of using it to support a programme of employment generation and income creation among the poor, we seem to be concerned with finding export markets for it.



# Class Differentiation within the Peasantry

## An Approach to Analysis of Indian Agriculture

Utsa Patnaik

*This paper argues that the Marxist theory of class differentiation within the peasantry provides the necessary analytical tools for looking at the agrarian structure both at a point of time and in its evolution over time.*

*This paper is mainly devoted to outlining a suggested criterion, termed the labour-exploitation criterion, for demarcating classes within the peasantry at the empirical level — as this is an essential preliminary step before we can apply class categories to the analysis of agrarian change.*

*Secondly, it is argued that even the very limited questions posed by the 'neoclassical' theory cannot be answered meaningfully by that theory because it abstracts from class analysis; additionally, there are a whole range of questions which that theory is not even capable of posing.*

### I

#### Introduction

SINCE Independence a number of representative surveys have been carried out in agriculture, and a large mass of factual material has accumulated relating to both the structure of landholding at differing points of time, and to various aspects of farm economics. The problem today seems to be not so much the lack of data, as the absence of a satisfactory application of theory to the analysis of the available data. The theory adopted determines not only the kind of questions that are asked but also the specific categories of analysis which indicate the particular methods of classification to be used in the statistical treatment of the available information.

It would not be incorrect to say that the majority of economists writing today on Indian agriculture have adopted one of two closely related theoretical positions: (1) The so-called "neoclassical" framework which focuses on the individual guided by subjective utility in decision-making under assumed competitive market conditions, and which ignores real conditions of production. (2) The second approach may be termed the Indian version of neo-Populism. This does not go explicitly into theoretical questions at all but adopts an empiricist approach to the problem of rural 'poverty', which is looked upon as some kind of economic disease afflicting an unfortunate segment of society. The 'neoclassical' framework has been used either explicitly in building models in order to answer questions about resource-allocation, the 'efficiency' of owner versus tenant farming, etc, or implicitly in the formulation of statistical exercises bearing on the same questions. The neo-Populist approach

has consisted in making estimates of the extent of rural 'poverty', with a careful avoidance of any discussion of a possible link between 'poverty' and wealth.

The purpose of this paper is to argue that the Marxist theory of class differentiation within the peasantry, constitutes a powerful alternative theory to the above, and provides the necessary analytical tools for looking at the agrarian structure both at a point of time and in its evolution over time. This paper is mainly devoted to outlining a suggested criterion, termed the labour-exploitation criterion for demarcating classes within the peasantry at the empirical level — as this is an essential preliminary step before we can apply class categories to the analysis of agrarian change. Secondly, we would argue that even the very limited questions posed by the 'neoclassical' theory cannot be answered meaningfully by that theory because it abstracts from class analysis; additionally, there are a whole range of questions which that theory is not even capable of posing. In a continuation of this paper to be published at a future date we hope to present a brief critique of some 'neoclassical' formulations in the light of the alternative Marxist theory; we will also try to demarcate the neo-Populists' one-sided and incomplete view of 'poverty', from the alternative understanding of the specific and indissoluble connections between poverty for the many and wealth for the few.

### II

#### Suggested Criterion for Empirical Classification of Peasantry

When we look at the data on the ownership and operation of land and the ownership of livestock, implements

and other means of production thrown up by the NSS and the Farm Management Studies, there is one fact which emerges strikingly: the high degree of concentration of both land and non-land resources with a minority of cultivators, while the majority have command over a disproportionately low share of resources. In Tables 1 and 2 we have summarised some of the data on land ownership and operation yielded by the NSS 8th Round relating to the early 1950s, by plotting the cumulative percentage of holdings ranked by farm size against the cumulative percentage of area commanded by them, and reading off the relevant figures for the top 15, middle 25 and bottom 60 per cent of households. (These particular cut-off points are chosen with respect to the 'middle' category which is defined as the households which have land roughly in proportion to their numbers.)

It will be seen that in 1953-54 the top 15 per cent concentrated ownership of as much as 70 per cent of total area, while at the other pole the 60 per cent majority of households had barely 6 per cent of owned area. The average owned area was some fifty times larger for the former compared to the latter. Only a minority of households — the middle 25 per cent — owned land in proportion to its numbers and the average owned area of this majority corresponded approximately to the all-India average. Despite widespread leasing of land amounting to one-fifth of total area operated, the extent of concentration of operated area (defined as owned area plus net area leased in or out) was almost as great as for owned area. The pattern of leasing is extremely interesting and explains the failure to mitigate ownership concentration to any noticeable extent. We find



that it is not only the large holdings which leased out and the small holdings which leased in land; there was considerable leasing out by small holdings and leasing in by large holdings. Thus the middle and lowest categories together accounted for some 42.5 per cent of total owned area leased out and indeed leased out a higher proportion of their owned area than did the large holdings. Conversely the top 15 per cent of operational holdings accounted for the major share — 62.5 per cent — of area leased in. We shall have more to say about this complex land lease situation later.

What these data show is that while small and medium holdings (making up some 85 per cent of all holdings) predominated numerically, it is the top 15 per cent of large holdings which predominated economically, and accounted for the bulk of the means of production in agriculture.

The extent of concentration has altered but negligibly in the next decade and half, as may be seen from the 1971 Census of operational holdings. (These figures are not exactly comparable, strictly speaking, with the NSS figures owing to differences in concepts used resulting in the exclusion of very minute holdings; but for our limited purpose the comparison is good enough.)

The implication of such a high degree of concentration of the means of production is that there is a correspondingly high degree of economic differentiation within the cultivating population. By 'economic differentiation' we refer to the fact that there is no single homogeneous type of holding with respect to the way production activity is organised, which may be taken as a 'representative' type. On the contrary, the very fact of concentration of means of production implies that there must be qualitatively distinct types of holdings which differ in the way their production activity is organised. A minority of households have so much resources relative to family size that they cannot cultivate with family labour alone but must rely primarily on the labour of others. At the other pole a large proportion of households — which may be the majority — have so little resources relative to the working capacity and consumption needs of the family that they must rely primarily on working for others in some form or another. Furthermore, these different types of

TABLE 1

## (A) Household Ownership Holdings

	Per Cent of Total			Owned Area Per House-hold (acres)	Per Cent of Owned Area Leased Out
	Households	Owned Area	Area Leased Out		
Top	15	70.0	57.5	22.40	9.4
Middle	25	24.5	25.0	4.71	11.7
Lowest	60	5.5	17.5	0.44	36.4
	100	100.0	100.0	4.80	11.4

## (B) Operational Holdings

	Per Cent of Total			Operated Area Per Holding (acres)	Per Cent of Operated Area Leased In
	Holdings	Operated Area	Area Leased In		
Top	15	66.7	62.5	24.16	19.1
Middle	25	25.5	27.5	5.54	21.9
Lowest	60	7.8	10.0	0.71	26.1
	100	100.0	100.0	5.43	20.3

Note: Calculated from data in NSS 8th Round (1953-54), Report No 36, pp 64, 78, 92, 106, 113, 120, and NSS Reporter No 74, pp 90, 104, 210.

holdings enter into relations with each other in the production process through labour hiring and land leasing.

The Marxist position is that economic classes are to be looked at in terms of the above two related criteria: possession of the means of production, and the exploitation of labour. In an agriculture such as India's, the two poles are readily identified: the landless and near landless who possess no or little means of production and are therefore mainly or wholly dependent on working for others; and the landlords and capitalists, who concentrate sufficient means of production not to need to labour themselves but live on employing others. Precisely in agriculture, however, the middle category of petty producers may be expected to be still fairly numerous: those who possess just sufficient means of production to make a living with family labour, neither employing the labour of others nor working for others.

Indeed, it is this type that most people have in mind when they talk about "the peasant": the ideal type of independent petty producer who neither exploits nor is exploited; and it is this type which is supposed to make up "the peasant economy" for those who think that independent petty production is still the defining characteristic of the agriculture of actual economies such as India's. (See for this viewpoint Thorner [3].)

Let us take this ideal type of self-employed peasant family, neither employing others nor employed by others, as our theoretical starting point. Even a cursory look at the available data, such as the NSS figures on landholding cited earlier combined with the Farm Management Studies, makes it clear that the majority of holdings in most regions do not fall into this category. The majority of holdings are so small that the peasant families have to work for others in one form or another — hiring out labour, taking in land at high rents — in order to make a living. (Table 6 shows that in W Bengal, for example, the holdings below 5 acres making up the majority were net hirers-out of labour to others.) Conversely a minority of large holdings which concentrate possession of land and other resources rely mainly on outside labour for production. The "family labour based peasant holdings" which neither exploit nor are exploited reduce to a relatively small proportion of all holdings and in most regions are by no means typical.

To repeat, the existing concentration of the means of production implies that the peasantry is highly differentiated economically into more or less distinct classes. However, the initial resources position of a holding, by itself is not sufficient to indicate class status accurately at the empirical level. A host of other factors are relevant: the size and



TABLE 2

	Per Cent of Total Holdings	Operated Area	Operated Area Per Holding (acres)
Top	15	60.5	25.4
Middle	25	26.0	6.6
Lowest	60	13.5	1.4
	100	100.0	6.3

Source: Calculated from Table 1, page 113 of All India Report on Agricultural Census, 1970-71.

composition of the family, the cropping pattern and intensity of cultivation, and the level of technique at which labour is combined with other means of production — all these would affect and be affected by differences in the organisation of holdings. For this reason, the very commonly used single index, size of landholding, is an unsatisfactory one except as a very rough approximation to class status. It would be a good index only if "everything else" other than area of landholding, remained the same as we moved across organisationally different types of holdings. But "everything else" in reality is not the same. As regards area itself, an acre of irrigated or high-fertility land, is obviously different from an acre of rain-fed or barren land. Even if varying types of land could be reduced to standardised units, the same standardised area can be cultivated on widely varying organisational bases: on a capitalist basis employing mainly hired labour with a high-productivity level of technique, or on the basis of mainly family labour employing an extensive low productivity level of technique. The way in which classification of farm data by area levels mixes up organisationally different types of holdings, has been discussed by us at greater length elsewhere[8].

While no single index can capture class status with absolute accuracy, we would suggest, that the use of outside labour relative to the use of family labour, would be the most reliable single index for categorising the peasantry. Firstly as mentioned earlier, those who concentrate the means of production in their hands would rely on exploiting the labour of others while those with little or no means of production would be obliged to work for others. (However there are certain minor exceptions which we will discuss a little later.) Secondly, the intensity of cultivation (which is related to irrigation and crop-

would be reflected in the total quantum of labour use and its breakup between family and hired labour. (For instance of two identical peasant families with identical gross sown area, if one cultivates more high-value labour-intensive crops compared to the other, not only will its total labour-requirements be higher but quite possibly it would use more hired labour.) Let us therefore try to formulate more precisely, the criterion of use of outside labour relative to family labour.

For a cultivator, there can be two types of use of outside labour in production: (a) direct hiring of others' labour (b) Indirect appropriation of others' labour through leasing out land for rent. Conversely there are the same two ways in which his labour may be appropriated by others: (a) direct hiring out of family labour, (b) indirect, through payment of rent for land leased in.

Historically, under European feudalism in particular, the payment for use of land was often labour rent (the peasant worked a certain number of days in the week for the lord) which later assumed the product, and finally money forms. Rent payment in the form of direct labour services has been, and is uncommon in India. However, whether rent is paid in kind or money, we can reduce it to labour days by taking the share it forms of gross output on the leased land, as an approximation of the share of total labour-days on leased land which is appropriated through rent. That is, we can express rent in the form of labour day equivalents.

We thus have two components (a) and (b) of the net use of outside labour on the given holding A

$a$  = Net labour days hired in  
= Labour days hired in ( $a_1$ )

— Labour days hired out. ( $a_2$ )  
 $b$  = Net labour days taken through rent  
= Labour days taken through rent ( $b_1$ ) — labour days given through rent ( $b_2$ )

$= r_1$  (total labour days on land leased out) —  $r_2$  (total labour days on land leased in).

where  $r_1$  = rental share to owner of land leased out, and  $r_2$  = rental share to owner of land leased in. (Hiring of labour refers to the operational holding).

Let us denote the net total use of outside labour,  $a+b$ , as  $x$ :  $x$  = net labour days hired in + net labour days

appropriated through rent =  $a+b$ ,  
=  $(a_1 - a_2) + (b_1 - b_2)$ .

For some landowners and cultivators who are substantial exploiters of others' labour,  $x$  will be positive and high. If the (b) component predominates in this high positive value of  $x$ , i.e., labour appropriation is mainly through rent, then clearly we are dealing mainly with landlords. If the (a) component predominates, we are dealing mainly with capitalists.

For other cultivators and landless who are substantially exploited, however,  $x$  would be negative and high in absolute value. If the (a) component predominates, we are dealing with the agricultural labourer, while if the (b) component predominates, the cultivator is a petty tenant.

For a middling category of primarily self-employed cultivators  $x$  will be relatively small in absolute value; or it might be zero. That is, either these cultivators will not be involved in exploitation at all, or they will be involved either way to a very minor extent.

However, knowledge of the absolute value of  $x$ , i.e., the extent of exploiting or being exploited, is not enough to draw the exact dividing line between classes. For this, the value of  $x$  has to be looked at in relation to the extent of self-employment. Let us define the latter, as

$y$  = family labour days in cultivation on the operational holding.

Let us now look at the ratio  $x/y$ , which expresses the extent of exploiting or being exploited, in relation to the extent of self-employment. We will call this the labour-exploitation ratio E.

$E = x/y$  net use of outside labour  $a+b$ /family labour days.

We are now in a position to categorise the peasantry into mutually exclusive economic classes by setting limits to the labour-exploitation ratio E, in accordance with the Marxist concept of economic class.

It must be stressed that the E ratio has been formulated as an empirical, and therefore descriptive, approximation to the analytical concept of economic class. It may not be the best possible approximation; ways may be found to obtain a better, more accurate single approximation. For the time being, we think it represents a workable attempt. A more detailed discussion of the reasons for formulating it in this particular way is given later, and so is a discussion of



the relation between the descriptive categories set out above, and analytical class concepts.

Before going on to discuss these classes, let us distinguish between the following divisions or strata within the exploiting classes — landlords and rich peasants — on the one hand, and within the exploited classes, on the other. The divisions are determined on the basis of which form of exploitation — wages or rent — predominates. The categories of Table 3A are more or less self-explanatory.

(1) The first category contains both big landowners of the feudal type and capitalists, distinguished from the peasants by the fact that family members do not perform manual labour in any major farm operations. (Supervision or operating machinery is not considered manual labour). The value of  $y$  is therefore zero. They rely entirely on the labour of others, whether through direct labour hiring — predominance of the 'a' component, defining the capitalist type — or indirectly with a predominance of the (b) component, rent-extraction, defining the still 'feudal' type of landlord. This category constitutes the large-scale appropriators of surplus (whether in the form of labour, product or value) in agriculture.

(2) The second category is the top stratum of the peasantry, the rich peasants. They perform some manual work in major farm operations and are therefore distinguished from the landlord/capitalists, in having some positive value of  $y$ . But their resource position per capita is so favourable that appropriation of others' labour whether directly or indirectly, is at least as important as, family labour in cultivation ( $x$  is not only positive but at least equals and usually exceeds  $y$ ). Depending on whether labour-hiring (a component) or rent (b component) predominates in the high positive  $x$  value, we may distinguish between a proto-bourgeois and proto-landlord stratum, respectively, within the rich peasantry. The rich peasantry is thus also an exploiting, surplus appropriating class.

(3) The middle peasantry is primarily self-employed, since on average its resource position per capita is such as to just employ family labour adequately and provide a livelihood at a customary subsistence level. However the middle peasantry has a dual character. A middle

Economic Class	Empirical Defining Characteristic	Remarks
(1) Landlord	$E \rightarrow \alpha$	$x$ positive and very high, $y$ zero
(2) Rich Peasant	$E \geq +1$	$x$ positive and high, $y$ positive, $x \geq y$
(3) Middle Peasant	$+1 > E > -1$	divisible into
(i) Upper Middle	$+1 > E > 0$	$x$ positive but small, $y$ positive, $x < y$
(ii) Lower Middle	$0 \geq E > -1$	$x$ zero or negative but small, $y$ positive, $ x  < y$
(4) Poor Peasant	$E \leq -1$	$x$ negative and high, $y$ positive, $ x  \geq y$
(5) Full-time Labourer	$E \rightarrow -\alpha$	$x$ negative and very high, $y$ zero.

peasant holding may be a net exploiter of others' labour, or it may be exploited itself — i.e.,  $x$  may be either positive or negative. In both cases, of course, self-employment is more important, i.e.,  $y$  exceeds (the absolute value of)  $x$ . It is necessary to make a subclassification within this large category, depending on the sign of  $x$ :

(a) We designate as 'upper middle peasants' those who are net exploiters of others' labour, so that  $x$  is positive and  $E$  is positive. These holdings have just crossed the subsistence barrier and can generate small retainable surpluses through such small-scale exploitation.

(b) The 'lower middle peasants' are those who either do not exploit any labour at all, net, so that  $x$  is zero and  $E$  is zero; or they are themselves exploited to some extent, so that  $x$  is negative and  $E$  is negative. The lower middle peasants, typically are still constrained by the struggle to reach a subsistence; they either just manage to break even through self-employment or, more commonly, must supplement inadequate income from own resources by working to a small degree for others.

(4) The poor peasants' per capita resource position is so bad as to necessitate working mainly for others in order to obtain a subsistence — whether directly through hiring out labour for wages or indirectly through leasing in land even on high rents, or a combination of the two; so  $x$  has a high negative value. Since the poor peasant operates some land whether owned or rented, there is a positive value for  $y$ , the family labour days in cultivation; but working for others is at least as important, so that (the absolute value of)  $x$  exceeds  $y$  or at best equals it. If the (a) component, hiring out, accounts

for most of the  $x$  value, the poor peasant is basically an agricultural labourer but also cultivating some land. If the (b) component, rent payment, predominates then the poor peasant is basically a petty tenant. Typically poor peasants cannot make ends meet and have to depress consumption standards below customary levels.

(5) The full-time labourer does not operate any land at all, so that  $y$  is zero. He is entirely or mainly dependent on hiring out his labour for wages in order to obtain a subsistence, so that  $x$  has a high negative value. (Some full-time labourers may own a small strip of land which they lease out; however the labour equivalent of the rent received or positive (b) component is not large enough to balance or outweigh the negative (a) component on account of hiring out.) Like the poor peasant, the full-time labourer seldom achieves customary levels of subsistence and moreover usually faces much greater uncertainty than even the poor peasants do, in obtaining the bare necessities for survival.

For those familiar with their classics, it will be evident that the labour-exploitation criterion suggested above is simply a slight formalisation — in terms of a single index which most closely captures class status — as well as a *synthesis*, of the analysis presented both by Lenin [1] treatment (see Lenin 1920) and by Mao Tse-tung [2].

Lenin discusses the following classes in the context of the European capitalist countries in 1920:

(i) "First, the agricultural proletariat, wage-labourers (by the year, season, or day) who obtain their livelihood by working for hire at capitalist agricultural enterprises." This corresponds to



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TABLE 3A

Empirical Characteristic			Remarks
(1) Landlord			
(a) Capitalist	$a > b$		Labour hiring greater than rent
(b) Feudal	$a \leq b$		Labour hiring at most as high as rent
(2) Rich Peasant			
(a) Proto-bourgeois	$a > b$		Labour hiring greater than rent
(b) Proto-feudal	$a \leq b$		Labour hiring at most as high as rent
(3) Poor Peasant			
(a) Agricultural labourer operating land	$ a  >  b $		Hiring out greater than rent payment
(b) Petty tenant	$ a  \leq  b $		Hiring out at most as high as rent payment
(4) Full time labourer	$b = 0$		Hiring out only form, no rent payment

category 5, 'full-time labourers', with the difference that in India not all are necessarily employed in capitalist enterprises.

(ii) "Second, the semi-proletarians or peasants who till tiny plots of land, i.e. those who obtain their livelihood partly as wage-labourers... and partly by working their own or rented plots of land, which provide their families only with part of their means of subsistence." This corresponds exactly to category 4, the 'poor peasants'.

(iii) "Third, the small peasantry, i.e. the small-scale tillers who, either as owners or tenants, hold small plots of land which enable them to satisfy the needs of their families and their farms, and do not hire outside labour." This corresponds to category (3b), the 'lower middle peasants'; additionally the latter also includes those who work for others to a minor extent.

(iv) "In the economic sense, one should understand by 'middle peasants' those small farms who, (i) either as owners or tenants hold plots of land that are also small but, under capitalism are sufficient not only to provide as a general rule a meagre subsistence for the family and the bare minimum needed to maintain the farm, but also produce a certain surplus which may, in good years at least, be converted into capital; (2) quite frequently... resort to the employment of hired labour." This corresponds to category (3a), which we have designated the 'upper middle peasants'.

(v) "The big peasants (*Grossbauern*) are capitalist *entrepreneurs* in agriculture, who as a rule employ several hired labourers and are connected with

the 'peasantry' only in their low cultural level, habits of life, and the manual labour they themselves perform on their farms." This corresponds to category 2, the 'rich peasants' again with the difference that in India not all are would-be capitalists but some may also be proto-landlord in character.

(vi) "... the big landowners, who, in capitalist countries — directly or through their tenant farmers — systematically exploit wage-labour and the neighbouring small (and, not infrequently, part of the middle) peasantry, do not themselves engage in manual labour, and are in the main descended from feudal lords." This corresponds to category 1, the landlords of the 'feudal' variety as well as those who have turned capitalist.

The main differences between Lenin's characterisation of classes in Europe (particularly of the full time labourers as a 'proletariat' and the rich peasants as 'capitalist entrepreneurs') and the relevant analysis for India today, would arise from the smaller extent of development of capitalist relations in India. Conversely, compared to China's agrarian structure of the 1930s the extent of development of capitalist relations appears considerably greater in India. Mao Tse-tung distinguishes between the following classes:

(1) "The Landlord: A landlord is a person who owns land, does not engage in labour himself or does so only to a very small extent, and lives by exploiting the peasants. The collection of land rent is his main form of exploitation." This corresponds to landlords of the feudal type in category 1 of Table 2; except that our 'landlords' are defin-

ed by the fact of not performing even a small amount of manual work. Note that there is no mention of landlords of the capitalist type at all.

(2) "The Rich Peasant: The rich peasant as a rule owns land. But some rich peasants own only part of their land and rent the remainder. Others ... rent all their land. His main form of exploitation is the hiring of labour ... a person who owns a fair amount of good land, farms some of it himself without hiring labour, but exploits other peasants by means of land rent, loan interest or in other ways, shall also be treated as rich peasant." This corresponds to category 2; note the distinction between those rich peasants who mainly exploit labour directly by hiring, and those who do so indirectly through rent and interest extraction, (corresponding to our 'proto-bourgeois' and 'proto-landlord' strata within the rich peasantry).

(3) "The Middle Peasant: Many middle peasants own land. Some own part of their land and rent the rest. Others ... rent all their land. A middle peasant derives his income wholly or mainly from his own labour. As a rule he does not exploit others and in many cases he himself is exploited by others ... Some middle peasants (the well-to-do middle peasants) do practise exploitation to a small extent, but this is not their regular or their main source of income." This corresponds exactly to our category 3. Note that a clear distinction is made between what we have termed the 'lower middle peasants' who either do not exploit or are themselves exploited, and the 'upper middle peasants' ('well-to-do middle peasants' above, who do exploit others to a minor extent.

(4) "The Poor Peasant: Among the poor peasants some own part of their land ... Others own no land at all but only a few odd farm implements. As a rule poor peasants have to rent the land they work on and are subjected to exploitation, having to pay land rent and interest on loans and to hire themselves out to some extent. In general, a middle peasant does not need to sell his labour power while the poor peasant has to sell part of his labour power." This corresponds to the 'petty tenant' sector of our category 4, namely those poor peasants who are exploited primarily through rent.

(5) "The Worker: The worker (including the farm labourer) as a rule



owns no land or farm implements, though some do own a very small amount of land and very few farm implements. Workers make their living wholly or mainly by selling their labour power. "This includes both the remaining section of our category 4 (those poor peasants who are primarily agricultural labourers but cultivating some land) and the whole of our category 5, the full-time labourers.

The obvious contrast with Lenin's analysis lies in the absence of any reference to capitalist production, which evidently was virtually non-existent in China at that date.

There is one interesting point of difference between the "Preliminary Draft Theses" (PDT) and the "How to Differentiate Classes" (HDC) formulations. In the first, labour-hiring is taken as the only main index for differentiating classes within the peasantry, and it is specified that the holding may be either owned or tenanted. In the second however along with labour hiring, rent exploitation (and indeed also loan interest) is explicitly included in differentiating classes. We believe that the reason for the difference is the following: in the context of the European capitalist countries to which PDT refers, rent exploitation by landlords where it still remained as a feudal hangover, affected all sections of the peasantry and therefore was not germane to the question of differentiation within the peasantry, which was a result of developing capitalist relations, i.e., of labour hiring alone. In the Chinese context however, extraction of rent and loan interest (besides labour hiring) by richer sections of the peasantry itself from poorer ones, was of some importance, hence had to be explicitly considered. The Indian case is somewhere between the two; we have included rent-exploitation along with hired labour exploitation in the E-criterion, so that our empirical formulation is closer if anything, to HDC than to PDT. The rationale is that even though capitalist relations are developing in India, rent-exploitation within the peasantry is still too important to be ignored.

The following observations may be made on the particular method of categorisation:

(1) The labour-exploitation criterion or E criterion for short, may appear somewhat clumsy involving as it does negative values. However formulating

it in these terms is useful, we believe, because the change in the sign of  $x$  which leads to a corresponding sign change in the E ratio, reflects the qualitative shift involved, when a peasant from being a net appropriator of others' labour becomes on balance, exploited himself. It underscores the practical rarity of the 'ideal case' of the 'family farm' which is not involved either way in any exploitative relations, (corresponding to the condition  $x = 0$  and  $E = 0$ ). It also brings out the fact that the middle peasant holdings are not a category *sui generis* uncontaminated by exploitation, but on the contrary are organically connected to (and indeed, as we shall see, over time give rise to) the other classes.

(2) Some partial exceptions to the application of the E criterion can arise in the Indian context. We have assumed above that those households which do not put in any family labour days  $y$  in cultivation, either (a) have zero  $y$  voluntarily because they are big exploiters of others' labour and have high positive  $x$  — e.g., landlords, or (b) have zero  $y$  non-voluntarily owing to lack of land and are substantially exploited, hence with high negative  $x$  — e.g., labourers. But in reality there may also be households with a small amount of land who have zero  $y$  like landlord and labourer, but at the same time have a low positive  $x$  unlike landlord or labourer. In short even though the resource position of these households is very poor, family members may not engage in manual labour at all but employ outside labour.

The oft-quoted cases of impoverished widows, minors, or very poor persons who will nevertheless not touch the plough owing to caste considerations, constitute these exceptional cases. Such persons' non-involvement in manual work evidently does not arise purely from an exploitative class position, so due allowance has to be made for them, in particular they cannot be classed as landlords. In practice at the level of the village, identification of such cases is not difficult and one guideline in terms of our criterion itself, is that the extent of exploitation of labour (the value of  $x$ ) is small. It is possible to specify absolute levels of  $x$ -value which are the averages obtained for rich peasants, upper middle peasants, etc; and to categorise the 'exceptions' into these classes depending on how their extent of exploitation compares with these

levels. In cases of doubt the additional criterion of income can always be used.

Another theoretical exception which is not of any practical importance in India, arises when there is a very high degree of mechanisation. Supposing a capitalist holding substitutes machinery for hired labour to such an extent that 'family labour' predominates over hired labour, while the content of the work-on-farm itself changes away from manual labour proper to mainly the operation of machinery. If our criterion is applied carelessly such a farm might get categorised as 'middle peasant' whereas in fact it is capitalist. Such a high degree of mechanisation however does not exist (except perhaps in a few pockets of Punjab-Haryana) and a careful application of the 'manual labour' concept would in any case get over the difficulty.

When holdings from a cross-sectional sample are classified according to the method suggested, we can look at the average economic characteristics of each class. How would we expect the main economic variables to behave?

(a) To start with owned farm acreage, we would obviously expect to find the smallest average acreage per household to be with the poor peasant holdings, increasing steadily as we go up the class ladder, the largest holdings being the landlords'. However whether the capitalist producers among them will have a larger average holding size than the rich peasant holdings, is by no means certain. To the extent that the capitalist tendency manifests itself in intensive application of capital to a given land area, capitalist holdings on average may not be any larger in area compared to rich peasant holdings.

(b) The average value of gross output per holding and the average value of non-land assets (livestock, equipment, etc) would tend to be highest for the capitalist holdings and decline as we go down the categories.

(c) We may also expect the largest investible surplus per holding (excess of gross output value over production costs including the family's subsistence) to be on the capitalist holdings with the rich peasant farms showing a low but positive figure. We would expect the middle peasant holdings to more or less break even and the poor peasant to show a deficit. (This is on the assumption that some 'normal' level of consumption per capita is postulated. In the absence of investment opportu-



ties, rich peasants may dissipate in conspicuous consumption what may otherwise have been invested. Conversely, the non-viability of poor peasants may show itself not in their 'going out of business', but in depressing the level of consumption far below that of any other group.)

(d) Regarding the behaviour of variables such as per acre output (land productivity), per worker or per work-day output (labour productivity), paid-out cost per unit of output, and surplus per acre and per worker, no firm statements can be made before an actual empirical application of the E criterion is made to cross-sectional data. On the basis of our analysis to be presented in a subsequent paper, we would expect the capitalist holdings to show the highest levels of both land and labour productivity. The rich peasant category may be expected to have the next highest level of labour productivity, declining steadily until we get to the poor peasant holdings. We hope to give the actual results of applying the E criterion to cross-sectional data, at a future date.

We will refer to the capitalist and rich peasant holdings as "large-scale producers"; the middle peasant category as "medium-scale producers" and the poor peasant category as "small-scale producers". (It must be stressed, though it is obvious enough, that our concept of 'scale' has nothing at all to do with the idea of "returns to scale", which refers to the proportion by which output changes for a giving proportionate change in all inputs in a production function. Our concept of 'scale of production' is simply the economic size of the production unit, where 'economic size' is measured by the same indices as in manufacturing: value of output, extent of employment, or value of the stock of equipment. The concept of 'returns to scale' is in fact logically not applicable at all to our categories. For, a capitalist has a different 'production function' altogether from a middle peasant and from any other category.)

(4) The labour-exploitation criterion is designed to bring out the fact that different classes within the peasantry necessarily enter into relations with each other in the production process, either through direct hiring in and out of labour or through the renting in and out of land; and the exact position of an individual in the system

of production relations so generated depends primarily on his initial resource position. The poor peasants and labourers are obliged to work for others, and the 'others' who appropriate their labour whether directly by hiring or indirectly by leasing, are the rich peasants, capitalists and landlords. The middle peasant category is also involved either way to some extent in exploitative relations, while remaining primarily self-employed.

The classification we have given is a descriptive classification at a point of time; we can apply the E criterion to cross-sectional data say from a sample survey of holdings, and group households into the class categories defined above. For the purpose of analysis of classes within the peasantry at a point of time we do not need to bring in the question of markets at all: classes are defined by the possession of the means of production and the associated set of relations within the production process.

For the purpose of looking at the process of change over time, however, we need to bring in the way that the operation of commodity production and exchange, affects the degree of differentiation within the peasantry. This depends on the fact that different classes within the peasantry have different production objectives and are involved in market relations in qualitatively different ways.

For example, the poor peasant who rents in land in order to ensure a subsistence for himself through cultivation, is in a qualitatively very different position in the 'lease market', compared to the rich peasant, who leases in land in addition to the substantial owned area he already possesses, not as a matter of necessity but merely to expand the scale of production with hired labour for profit. The lower middle peasant who takes a loan at a high interest just to meet his seed or necessary consumption cost and keep production going, has a qualitatively different kind of involvement in the market for loans compared to a capitalist who takes a low-interest loan from a bank to buy a tractor. A poor peasant who sells his output to a trader at a low price immediately after harvest in order to meet pressing cash needs, is involved in a qualitatively different way in the product market compared to a landlord who holds on

to stocks and sells directly to wholesalers or through a co-operative, at a high price for profit. The examples could be multiplied. In brief, the initial class position determines the type of involvement in markets; and the latter in turn reacts back upon, and affects the class position. Under a regime of commodity production, those who are in an initially advantageous position, tend — as an average phenomenon — to move upwards in the class hierarchy; while those in an initially disadvantageous position, tend on average to move downwards in relative if not in absolute terms. In short, the degree of class differentiation tends to increase.

This dynamic interrelation between class structure at a given point of time, and differential types of involvement in commodity production and exchange relations which react back on the degree of class differentiation, is a subject we do not propose to take up here. Our purpose is simply to lay the groundwork for such an analysis by taking the first step — clearly specifying the labour exploitation criterion by which, at a given point of time, classes within the peasantry can be distinguished. For this purpose we have considered the exploitative relations arising in the actual *production process* itself, where the labour of one set of persons is appropriated by another set either through direct labour hiring or through rent. However it must be borne in mind that exploitative relations are not confined to the production process. Certain persons with no direct control over land, such as traders and moneylenders, can nevertheless acquire a claim on a part of the peasant's surplus labour and appropriate it in the form of trading profit, and interest, respectively. The reason that the trader and moneylender do not figure in our chart is because they represent essentially capital in the circulation process, and not in the production process; and their influence, however important, is nevertheless subsidiary to that of direct production relations, because (a) it is production relations which define the way in which surplus labour is generated and appropriated, (b) The fact that persons outside the ambit of the production process such as moneylender or trader, can lay a claim on the producer's surplus labour is in turn a result of the already existing production relations



and forms of appropriation. For example, it is because a poor peasant is a poor peasant in terms of our criterion — i.e., with little means of production and dependent on working for others — that it is likely that he will be unable often to meet his requirements of working capital and hence be forced to take loans merely to keep production going and keep himself alive. Similarly, because a lower middle peasant is a lower middle peasant in terms of our criterion, it is likely that he will have little holding capacity and be obliged to part with output to the trader on unfavourable terms. In short, the operations of moneylenders and traders, in particular their differential impact on the different classes within the peasantry, cannot be understood without a prior analysis of these classes defined in terms of production relations. Secondly, moneylending and trading capital, or capital performing these functions, may of course be deployed by the landlords and rich peasants themselves — the exploiting classes which, precisely because of their class position, have investible funds. In such a situation, in addition to the appropriation of surplus labour through profit and rent in the production process, we also have appropriation in the form of interest and trading profit, by the same persons.

To sum up, Table 3 does not give an exhaustive coverage of all agrarian relations but only those arising directly in the production process; and the rationale for this is that other relations such as those between the trader and moneylender on the one hand and different classes within the peasantry, are themselves conditional upon the existence of class differentiation arising in the production process.

### III

#### Class Categories and Tenure Categories

It will be clear from a study of Table 3 that class categories cut right across tenure categories such as 'pure owner', 'pure tenant', and 'mixed owner-cum-tenant'. To bring out this fact more clearly we have set out Table 4 in the forms of a matrix. It can be seen that every single class owning land, can in principle be a lessor of land to others, viz., have a positive value for the  $b_1$  component of the  $b$  value ( $b_1$  is the labour days

appropriated though taking rent). Thus the category 'lessors of land' includes the landlord, capitalist, rich peasant, middle peasant, poor peasant and even the labourer owning but not operating any land. Of these the landlord necessarily, by definition, must be a lessor of land (indeed a net lessor of land) to others; but a member of any other class can also be a lessor. The 1951 Census reported that 51,000 agricultural labourers had rent from land leased out as a secondary source of income. More generally, going back to Table 1 we see that 42.5 per cent of all owned area leased out in 1953-54 was on account of the 'middle' and 'bottom' 25 per cent plus 60 per cent of households, who together had owned area below the all-India average. The importance of petty lessors was thus substantial.

Similarly, every single class operating land, including the landlord (but by definition excluding the full-time labourer) can be a lessee of land from others, i.e., have a positive level of tenancy, expressing itself in a positive value for the  $b_2$  component of the  $b$  value ( $b_2$  is the labour days given through rent on land leased in). In principle, holdings in every single class except landlord and labourer, can also be pure tenant, viz., have the entire operated area leased in. Mixed owned-cum-tenanted character of the operational holding is compatible also with landlord, capitalist, rich peasant, middle peasant or poor peasant status. From Table 1 again, we see that 62.5 per cent of all operated area leased in was on account of the top 15 per cent minority of holdings with higher-than-average 'operated area'. The importance of substantial 'tenants' was thus considerable.

In short, leased-in area was concentrated with the large holdings no less than was operated area. Nor is the situation very different today, as the 1971 Agricultural Census shows (Table 5). We find that the biggest 15 per cent of all operated holdings accounted for half the total area under lease compared to less than a fifth with the 60 per cent majority of holdings.

It is also fallacious to identify pure tenancy (entire operated area leased in) with poor or middle peasant status, as most people are prone to do. The data show that of all wholly leased holdings, the biggest 15 per cent with an average area per holding of over 14 acres accounted for 56 per cent of

total area leased in compared to less than 18 per cent with the 60 per cent majority of small pure tenant holdings with an average area of just over one acre. Of course, the all-India figures given here conceal considerable regional variations. In states like West Bengal and Bihar we find that pure tenants and the bulk of area under pure tenancy, are almost entirely confined to very small holdings, and in such a case it is probably legitimate to take pure tenancy as synonymous with poor and lower middle peasant status. By the same token however in other areas such as Punjab and Gujarat we find numerous large-scale pure tenant holdings, which in class status are bound to be very different from the small and medium scale holdings with which they co-exist. The former represent commercial leasing for profitable production as opposed to the latter which represent mainly hunger-leasing for satisfying consumption needs. Indeed, we may expect to find commercial leasing developing most in areas where the capitalist tendency is strongest.

Recognition of this complex character of the market for leases (if indeed we can talk at all of a single market), is essential for a realistic and correct analysis of such important questions as the impact of tenancy reform, which we take up in another section. Clearly, the relationship between lessor and lessee will be determined primarily by the class position of each. We are familiar with a situation where a poor peasant or lower-middle peasant, faces as lessee the landlord, who is the lessor. The bargaining position of the poor peasant or lower middle peasant, who does not possess enough land or other means of production to secure employment and subsistence, is clearly bound to be weak vis-à-vis the landlord who concentrates landed property in his hands. But what of a situation where the rich peasant or the capitalist faces, as lessee, the poor peasant or labourer, who is the lessor. Such a situation is by no means uncommon, where the rich peasant wishes to expand the scale of production with hired labour and so leases land which the poor peasant has given up cultivating owing, say, to the death of the only bullock he possesses. In this case the rich peasant 'capitalist tenant' is in a far stronger bargaining position than the peasant lessor, and the terms of the lease are bound to reflect this fact.



The complexity of the lease market thus arises from the fact that, firstly, there is a high degree of class differentiation within the peasantry; and secondly, the class categories cut right across tenure categories. It is therefore not legitimate at all to identify tenurial status with class status, as people are often tempted to do.

To repeat, the legal category 'tenants' contains extremely heterogeneous elements in class terms, ranging from the poor and middle peasants, to rich peasants and capitalists. Undoubtedly, in terms of numbers the poor and middle peasant tenants were the most important in the mid-50s and continue to remain the numerically predominant element today. But the rich peasant tenants were economically very important; this follows simply from the fact that the average area they leased in per holding was so much larger. A single rich peasant leasing in one-third of a 30-acre operational holding, would be as important in terms of leased area controlled, as ten poor peasant 'pure tenants' each leasing in one acre. This explains the high degree of concentration of leased-in area (Table 1).

The simultaneous co-existence of poor peasant tenants and rich peasant tenants, has certain implications in terms of the theory of rent. It implies that not only precapitalist rent, but also some transitional forms to capitalist rent, exist. Whether rent is precapitalist or capitalist in character, depends entirely on the underlying production relation, viz, what class of cultivator is paying the rent. For a poor peasant or middle peasant working rented land with family labour with the objective of getting a living, land will be leased as long as the output after paying the rent covers costs of production including some return to family labour. In a situation of widespread unemployment of agricultural labourers the return to family labour that such peasants are obliged to accept, may well be below the agricultural wage rate.) Here rent is precapitalist rent, absorbing the entire surplus produce over and above necessary production costs. Indeed if the subsistence of the family is regarded as it should be, as a necessary cost, rent may eat into production cost itself; poor and lower middle peasants are typically obliged to underfeed their bullocks and underfeed themselves in order to obtain

the very conditions of production, viz, land on lease.

For the rich peasant however, the objective of production on leased land is not to get a subsistence, which is already assured by the superior resource position itself; but to obtain a larger surplus. Land will be leased in provided the output after paying rent not only covers costs of production but also gives some profit. Rent here represents, if not full-fledged capitalist rent (surplus profit over and above a 'normal' average profit), at least some transitional form to it, in that the rent does not absorb the entire surplus product but leaves some element of profit. For the capitalist producer proper, putting his capital into agriculture as a field of investment, renting in land will be worthwhile only if the profit on the capital invested in production on that land not only covers the rent payment but also gives at least the normal rate of profit obtainable by investing the same capital elsewhere in the economy.

This is the reason why capitalist production (which has always emerged, historically, either from petty production or surrounded by the latter) has been necessarily characterised by technical progress, viz, a higher level of both land and labour productivity, or at the very least, a higher level of one for equivalent levels of the other, when compared to petty production. The historical possibility of undertaking capitalist production at all, simply does not exist if the technical conditions are the same as those open to petty producers. It is easy to see that if a given rent of Rs  $x$  per acre paid by a petty producer represents the entire surplus produce over and above necessary cost, then the same rent of Rs  $x$  per acre which a capitalist would have to pay (assuming he competes with petty tenants) cannot possibly represent only a part of the surplus produce (the rest being the profit which is the rationale of capitalist production) unless the capitalist obtains a substantially higher surplus per acre compared to the petty producer. Since petty producers are already producing at the minimum necessary cost within the existing set of techniques — indeed they may be cutting into necessary cost itself by underpaying family labour — surplus per acre cannot be raised further within the existing technical conditions through cost-cutting.

The only possibility the capitalist producer has of obtaining a higher surplus per acre, is to invest in technically more advanced production methods which, for a given level of labour productivity (output per work-day) raises the productivity of land (output per acre) compared to petty production.

Even if the capitalist does not need to lease in land on rent because he owns it, the fact that he can *potentially rent out owned land* to petty tenants and derive precapitalist rent, would be sufficient to ensure that he must operate with more advanced techniques, viz, obtain a higher level of land productivity for the same level of labour productivity as petty producers, if direct capitalist production is to make economic sense and be at all undertaken. (This argument is discussed in greater detail below.)

The neo-classical and neo-populist schools totally ignore the historical impossibility of the co-existence of petty producers and capitalist producers under conditions of identical technical production conditions for both. This follows from their lack of any theory of rent, in particular of the different historical forms of rent. Indeed both schools habitually assume the impossible: that small-scale family labour based producers, and capitalist producers, operate with "identical production functions." As we shall see later all idealisations of petty production, in particular assertions about their "superior efficiency" compared to capitalist production, are based on this fallacious premise.

#### IV

##### Empirical Application of the E Criterion

Given data on farm economics from a representative sample at a point of time, we can put households into classes by working out the value of the labour exploitation ratio  $E$  for each holding and then grouping according to the limits specified in Table 2. From the statistical point of view the  $E$  criterion simply represents the translation of the concept of economic class in agriculture into an empirically applicable form, so that a meaningful level of aggregation of data can be obtained.

A number of sample surveys of various aspects of agriculture have been carried out since Independence



TABLE 4 : MATRIX OF POSSIBLE LESSOR-LESSEE RELATIONS AMONG CLASSES

Owned Land Leased Out To	Operated Land Leased In From						Owned Land Leased Out
	1 Landlord	2 Capitalist	3 Rich Peasant	4 Middle Peasant	5 Poor Peasant	6 Full-time Labourer	
(1) Landlord	a <sub>11</sub>	a <sub>12</sub>	a <sub>13</sub>	a <sub>14</sub>	a <sub>15</sub>	X	L <sub>1</sub>
(2) Capitalist	a <sub>21</sub>	a <sub>22</sub>	a <sub>23</sub>	a <sub>24</sub>	a <sub>25</sub>	X	L <sub>2</sub>
(3) Rich peasant	a <sub>31</sub>	a <sub>32</sub>	a <sub>33</sub>	a <sub>34</sub>	a <sub>35</sub>	X	L <sub>3</sub>
(4) Middle peasant	a <sub>41</sub>	a <sub>42</sub>	a <sub>43</sub>	a <sub>44</sub>	a <sub>45</sub>	X	L <sub>4</sub>
(5) Poor peasant	a <sub>51</sub>	a <sub>52</sub>	a <sub>53</sub>	a <sub>54</sub>	a <sub>55</sub>	X	L <sub>5</sub>
(6) Full-time labourer	a <sub>61</sub>	a <sub>62</sub>	a <sub>63</sub>	a <sub>64</sub>	a <sub>65</sub>	X	L <sub>6</sub>
Operated land leased in	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	L <sub>4</sub>	L <sub>5</sub>	X	$\sum L_i = \sum L'_i$

Notes: (1) The underlined entries are the ones most people have in mind when they think of leasing of land : viz, leasing in by the various categories within the peasantry (rich, middle and poor) from landlords. The purpose of the matrix is to show that in principle, positive values can exist for all other entries. In practice they do exist (i.e., poor and middle peasants also lease out land, rich peasants lease in land, etc.). (2) Since we are considering land leasing in and out within a closed set of classes specified above, the column totals add up to equality with the row totals, i.e.,  $\sum L_i = \sum L'_i$ . In reality however there is also net leasing in of land from people who own land but whose principal activity is non-agricultural. The operated area leased in by the above classes therefore exceeds the owned area leased out by the same classes, in practice.

by the Farm Management Studies, the NSS, and the RBI, and a very large volume of factual material has accumulated. With the sole exception of the RBI studies, the method of aggregation used has been invariably, acreage classes (size of holding) alone. This reflects an implicit theoretical position, viz, that the size of farm measured by acreage is the most meaningful single index for looking at the economic characteristics of holdings.

What is the relationship of the acreage criterion to the labour exploitation criterion? Even though, obviously there is a more or less strong positive relation between the two (since capitalist and rich peasant holdings are of larger average acreage than middle peasant ones which in turn are larger than poor peasant ones), at the same time the acreage classification cannot provide information with any detail or accuracy on the economic characteristics of classes within the peasantry as defined by our E criterion. The latter tries to capture certain qualitative differences in the way production activity is organised whereas acreage is simply one quantitative element albeit a very important one, among others which affects or enters into, these qualitative differences. For this reason, the acreage grouping tends to mix up holdings of different economic classes to some degree. (To give an analogy, supposing a set of  $n$  persons consists of an equal number of men and of women. We have information on their height and we know that on average men are taller than women. We can rank the  $n$  persons according to height groups; however it would not be correct to

identify the taller  $n/2$  persons so ranked as 'men' and the shorter  $n/2$  persons as 'women' because clearly, the first set might contain some tall women, and the second set might contain some short men. The height-grouping tends to mix up persons of different sex to some degree.) For this reason, the economic characteristics of holdings in a particular acreage-class are apt to be misleading if treated as pertaining to a particular economic class. (As we shall see, almost without exception economists have fallen into the trap of regarding low average per acre output on large-sized farms as a characteristic of 'capitalist' farms.)

For an accurate idea of the extent of class differentiation and the economic characteristics of the different classes, we need to work out the E value for every single holding in a cross sectional sample, then group holdings according to the intervals of E value suggested above. (Having done this we could of course also look at the acreage-level characteristics of holdings within a particular class.) We hope to give the results of such an analysis, at a future date.

For the present we are constrained to use data already grouped by acreage levels (and therefore already mixing up the class distinctions to a certain degree). Purely as an illustration of how the E criterion can be applied, we have taken the information on use of family and hired labour, available in the Farm Management Study, 1956-57 in West Bengal (see Table 6). Net labour days hired in and out per holding, can be obtained from this, negative values indicating that holdings

are net hirers out of their family labour to others, while positive values indicate that they are net hirers in of others' labour. Dividing the value of net labour days hired in/out, by the family labour days worked on the operational holding we obtain the E values. It should be noted that the exercise is an incomplete one since we have no way of working out the net labour days appropriated/given in the form of rent for land leased out/in. Thus, we have only the 'a' component of the x-value per holding, but not the 'b' component. This is a serious omission given that leasing, both open and concealed, is of such importance in West Bengal. It would have the effect of considerably understating the actual extent of class differentiation, by inflating the importance of the middle peasantry at the expense of other groups.

Bearing the above drawbacks in mind, let us look at Table 6, which gives quite an interesting picture of class differentiation despite the limitations of the exercise. We find that the smallest holdings are the largest net hirers out of their labour to others; the extent of hiring out decreases with increasing farm size and crosses zero somewhere below the 5-acre level. The holdings above this level are net hirers-in of others' labour, to an increasing extent with increasing farm size. Thus we can clearly see the employer-labourer relationship which exists within the peasantry itself, between the operators of the dwarf holdings and the operators of large holdings (quite apart from the landless labourers who are not included in the



TABLE 5

## (A) Leased Area on Operated Holdings

	Per Cent of Total	
	Operated Holdings	Area Leased In
Top	15	50.0
Middle	25	31.5
Lowest	60	18.5
	100	100.0

Source: Calculated by aggregating states figures in All-India Report on Agricultural Census 1970-71, Part II, Table III each state. No data available for area of wholly leased-in holdings in Tamil Nadu and Uttar Pradesh or for the leased-in portion of mixed holdings in Bihar and Gujarat. Above therefore excludes these.

## (B) Wholly Leased-In Holdings

	Per Cent of Total		
	Wholly Leased Holdings	Operated (= Leased) Area	Operated (= Leased) Area Per Holding, (Acres)
Top	15	56.0	14.2
Middle	25	26.6	4.1
Lowest	60	17.4	1.1
	100	100.0	3.8

Source: Calculated from All-India Report on Agricultural Census 1970-71, Table III page 114.

sample).

Dividing the  $x$  values by the number of family labour days per holding (the  $y$  values) we obtain the average exploitation ratio  $E$  for each size class. This shows the expected pattern, being *negative and greater than unity* (in absolute value) for the smallest holdings, decreasing in absolute value and crossing zero just below the 5-acre level, then becoming *positive* and increasing steadily with increasing farm size, crossing unity somewhere around the 10 acre level. If we plot the  $E$  values against the mid-points of the relevant acreage classes and assume that the  $E$  value varies continuously, we obtain a graph. Applying the classification of Table 2 to this we find that the poor peasants ( $E \leq -1$ ) on average operate 1.60 acres and less, the middle peasants ( $1 > E > -1$ ) operate be-

ween 1.61 and 9.80 acres (lower middle peasants, 1.61 to 4.60 acres; upper middle peasants, 4.61 to 9.80 acres) while the rich peasants, capitalists and landlords operate on average 9.81 acres and above. It will bear repeating that these limits are far from accurate and they grossly overstate the size of the middle peasantry, because (a) land leasing could not be taken into account, (b) the data are already grouped by acreage levels.

Table 6 gives quite a clear picture of class differentiation, despite the prior grouping of the data by acreage classes (so that what we have is only the average  $E$  value for holdings in each given acreage class, rather than a grouping on the basis of working out the  $E$  value for each individual holding, which would be the correct procedure). However, it is important to realise that the converse proposition need not be true. If for a particular region the FMS data grouped by acreage do *not* give a clear picture of class differentiation, it does not necessarily follow that in reality, class differentiation does not exist. In the case of the West Bengal data we have used, the fact that we get a fairly clear picture of differentiation despite the acreage grouping, might be owing to the following reasons: either (1) there is no great heterogeneity in the technical conditions of production (such as cropping pattern, intensity of cultivation, extent of irrigation, etc) across holdings of similar physical area. If so, then the acreage groupings would not jumble up holdings of differing organisations, i.e. class status, to any significant extent. To put the same thing differently, if 'everything else' other than physical farm size remains more or less the same as we move across organisationally different types of holding, then acreage is good enough as an index of class status. Alternatively, (2) There does exist heterogeneity and therefore the acreage grouping does jumble up organisationally different types of holdings to more than an insignificant extent. But the actual extent of class differentiation is so much *more* acute than Table 6 suggests, that this jumbling-up only moderates the picture of the extent of differentiation without totally obscuring it.

It is quite possible that in a region where the FMS data grouped by acreage, do not give a clear picture of

differentiation, neither of the above conditions holds. In that case, even though class differentiation does exist in reality, it would not come through in the FMS data because the acreage grouping would have the effect of totally obscuring it.

We may refer here incidentally to a recent argument that "the standard Marxist definition" of poor peasant which associates poor peasant status with lack of resources and selling of labour power, "does not hold in any clear way" in India because small holdings below 2.5 acres in the West Bengal FMS Reports, are found to hire labour [6]. First of all, quite clearly it is essential to consider the net labour use situation in every case in ascertaining the class status, as we have done for instance in formulating the  $E$  criterion. To say that "the poor peasant holding does not hire labour" is absolutely correct provided we understand by this that on balance, in a *net* sense it does not hire in labour.

Thus in Table 6 which uses also precisely the West Bengal FMS data, the smallest holdings below 1.60 acres are on average large *net hirers-out* of their family labour; and they hire out to a greater extent than self-employment on the operated holding ( $x = a_1 - a_2$  is negative because  $a_2 > a_1$ ; and  $|x| > y$ ), thus satisfying our empirical formulation of "the standard Marxist definition" of poor peasant. The fact that these same holdings also happen to *hire in* some labour ( $a_1$  is non-zero) does not alter their class position, any more than the fact that they might lease out some land ( $b_1$  being non-zero) makes them into "landlords"! Incidentally, the small holdings below 2.5 acres which the authors cite, must contain a fair proportion of lower middle peasant holdings and are not exclusively poor peasant as they seem to assume.

Similarly for the correct definition that rich peasants have substantial resources and exploit hired labour. Provided they are rich peasant, on our empirical formulation of the "standard Marxist definition" (*net* exploiters of others to a greater extent than self-employment), which is satisfied on average by holdings above 9.80 acres in Table 6, then the fact that these same holdings do hire out some family labour ( $a_2$  is non-zero) does not alter their class position in the least, or give any grounds for confusing them with labourers.



Secondly, it is also clear that a simple measure such as "the proportion of hired labour to total farm labour" which the authors use to compare farms of different size, can in fact provide no clear idea of differing class status. A person may get his entire tiny holding cultivated by someone else and work himself as a full-time labourer. All we would know is that "cultivation is entirely based on hired labour", as it is on a large-scale capitalist holding! Or, a rich peasant may have a much smaller operated area compared to owned area, so that the use of direct hired labour in total farm labour on the operated holding is small, as for middle peasants; and derive his rich-peasant status primarily from rent-extraction (which does not get at all reflected in the measure used). The examples could be multiplied.

In short, only a complex measure such as the labour exploitation criterion (or something based on the same principle) which expresses in scalar form the interaction of a number of different variables entering into class status, can come near capturing the essence of the Marxist concept of class by taking into account as many aspects of exploitation as possible. We would conclude that "the standard Marxist definition" of class is fully applicable to the Indian situation. It becomes non-applicable *only* if we choose to interpret it empirically, in a simplistic and mechanical manner. In other words, the problem is not with the Marxist concepts; but the use of inadequate or misleading statistical measures, which in turn arises from a failure to grasp the essence of the concepts themselves. (Incidentally, the E criterion itself is an approximate index of class status, because neither exploitation in product and credit markets, nor the fact of non-agricultural sources of incomes, is taken into account. All we are claiming is that it is a far closer approximation and a more accurate *single* index of class status than any used so far. It has of course to be supplemented by additional information in any actual application.)

It goes without saying that it would be useful to know the concrete circumstances under which (i) poor peasants hire in some labour and conversely (ii) rich peasants hire out some labour — starting of course from a proper identification of the poor pea-

TABLE 6: NET LABOUR DAYS HIRED IN RELATION TO FAMILY LABOUR DAYS, WEST BENGAL

1 Operated Holding (Acres)	2 Labour Days Hired In (a <sub>1</sub> )	3 Labour Days Hired Out (a <sub>2</sub> )	4 Net Labour Days Hired In x = (a <sub>1</sub> - a <sub>2</sub> )	5 Family Labour Days y	6 Exploita- tion Ratio E = x/y
0.01- 1.25	10.37	101.07	- 90.70	57.83	-1.57
1.26- 2.50	37.48	84.42	- 46.94	92.66	-0.51
2.51- 3.75	53.56	74.15	- 20.59	151.50	-0.14
3.76- 5.00	86.10	89.50	- 3.40	160.65	-0.02
5.01- 7.50	131.26	91.67	+ 39.59	253.61	+0.16
7.51-10.00	118.49	11.58	+106.91	306.60	+0.35
10.01-15.00	478.80	0.50	+478.30	171.33	+2.79
Above 15	823.28		+823.28	NA	NA

Note : All figures are averages per holding. NA = Not Available.

Source: Farm Management Studies, West Bengal, 1956-57. Cols 2 and 3 from Table 3.30 p 33, Col 5 from Table A-11, p 197 and Col 3.

sant and rich peasant holdings on the basis of the E criterion. One question which springs to mind is: does some of the labour-hiring by poor peasants have something to do with hiring of draught cattle or equipment which they lack; conversely is a part of the hiring out of labour by rich peasants complementary to hiring-out of equipment, draught cattle, water, etc? There may be a number of specific causes. Our guess is that a concrete investigation would show that labour hiring by poor peasants tends to be a qualitatively different phenomenon from labour-hiring by rich peasants, despite the superficially similar form; and the same goes for the hiring out of labour by poor peasants and rich peasants, respectively.

## V

### Operational Significance of Labour-Exploitation Criterion

Very often, the size of landholding owned, perhaps adjusted for irrigation, is used as an index of class status. "In this region persons owning ten acres or more of wet land are landlords", would be a typical way of putting the matter, or, a particular acreage is taken as a subsistence holding: "In such and such area, three acres of wet land or twelve acres of dry, or a suitable equivalent combination, is sufficient to provide an average family of five with a subsistence. Those owning less are poor peasants and those owning more are rich peasants" — to take another hypothetical example.

This 'acreage criterion' of class status, is quite adequate for many purposes, especially when it is applied at the level of a village, where the soil-types, crops, rainfall and irrigation,

other technical conditions of production can be expected to be relatively homogeneous across holdings. (Even at the village level, it would of course become inaccurate if there is a very marked capitalist tendency with some holdings going in for intensive application of new inputs or machinery on a given area while others do not.) As we have seen however, it becomes inadequate as soon as we pool data from areas with heterogeneous production conditions for then it is possible that farms of similar area can differ greatly in class status. In such cases it becomes essential to use a more direct and accurate index of class status such the labour-exploitation index.

The reasons for the operational popularity of the acreage criterion, are obvious: acreage is easily measured and difficult to hide (at least from people on the spot), whether land is wet or dry is also easy to ascertain — in short, no complicated economic calculations are involved. By contrast the labour-exploitation criterion while being much more accurate, is undoubtedly more complex and does involve knowledge of total labour use and its break up. Its operational significance would appear to be limited. Nevertheless, we would suggest that for any proper analysis of agricultural production relations with all its practical implications, the use of the labour-exploitation criterion (or something similar based on the same principle) is essential. It is essential for the following reasons.

(1) The most important application of any class analysis in agriculture, is to the question of land reforms. This can be broken up into two related parts: (1) Redistribution of land from landlords to the peasantry, (2) Reform of the landlord-petty tenant relation.



ship through either (a) enabling the tenant to become an owner, (b) or, if the tenant remains as a tenant to ensure security of tenure, fair rents, etc. (1) With respect to land redistribution the official policy has been to fix some level of 'ceiling' to the acreage which can be held by a nuclear household, the exact level varying from place to place and also depending on whether land is wet or dry. Whatever the level that is fixed, it will not normally coincide with class distinctions. Two separate types of problems will arise, of which the first has attracted attention but not the second: (i) a given level of ceiling in a particular region — say  $x$  acres of wet land and  $y$  acres of dry land — may be too high to affect the majority of landlords who are comfortably below that level. This seems to be the case even after ceiling levels were revised, in most states. (ii) This can be remedied by lowering the ceiling considerably but in such a case it is certain that a number of rich peasants and very likely even some upper middle peasants will come within the application of ceiling laws. In short, any level of ceiling which seeks to include most or all landlords, is also bound to affect a section of the peasantry. This simply follows from the fact that acreage is a far from accurate indicator of class status. A mechanical application of ceiling without at the same time an independent analysis of the class structure in the region concerned will be either (1) ineffective if the level of ceiling is too high, or (2) inequitable if the ceiling is lowered to an effective level.

(II) With respect to tenancy reform and particularly the conferment of ownership on tenants or prevention of eviction, only a class analysis (1) can adequately explain the fate of attempted tenancy reform since Independence, (2) indicate the type of modifications which must be made to the laws if they are to come anywhere near tackling the tenancy problem even at a purely theoretical level. (1) Since Independence, most states in India have passed laws designed to (a) ensure that if not all tenants, certain categories of tenants who have been in occupation for a specified number of years, are given permanent rights of possession (b) provisions were also made to enable these tenants to become owners by paying a multiple of the land revenue as purchase price of the

land under their tenancy.

Firstly, the majority of unrecorded tenants on oral and informal leases, did not come within the purview of these laws. Of the relatively privileged tenants who did, a large proportion were evicted or surrendered the land, some succeeded in staying in occupation, while a minority in fact purchased ownership. This is the common finding which emerges from a number of detailed evaluation studies, based on sample surveys, in different regions of India [7]. The relevant question to ask is: who were the tenants that were evicted; and who were the tenants that succeeded in remaining in occupation, or in purchasing ownership?

Given the fact, established earlier, that the legal category 'tenants' includes not only poor peasant and middle peasant cultivators, but also rich peasant cultivators; and that moreover the last class accounted for a very large proportion, probably the major part, of all area leased in, the following answer suggests itself. Those tenants who succeeded in purchasing ownership were mainly the rich peasant tenants who had a relatively strong economic position, could wage litigation if necessary and had the cash savings to purchase ownership. Those tenants who succeeded in remaining in occupation were at least of middle peasant status; while those who were evicted were mainly the poor and lower middle peasant tenants who were in the weakest economic position. Since the evaluation studies cited [7] did not, unfortunately, ask direct questions bearing on the class status of tenants who were evicted, those who remained, and those who purchased ownership, we have only indirect and suggestive evidence bearing upon this commonsense hypothesis.

Thus, one of the earliest studies, carried out in 1954-55 by A M Khusro [7.2] on the effects of jagirdari abolition in Hyderabad, showed that roughly 42 per cent of all 'protected tenants' created in 1951 (tenants with six years or more of recorded occupation of land) were thrown out in jagir areas under the heads of legal and illegal evictions, and 'voluntary surrender', by 1954-55. Only one-eighth had exercised the right to purchase land while under half of the tenants remained in occupation. While there

was not much difference in the size of the tenanted plots of those who remained compared to those who were thrown out (except in Marathwada region) the author tells us that the former were on average the bigger operators of land while the latter operated small holdings. Even though some amendments were later made to the laws to make forcible surrenders and evictions more difficult, a sample survey of tenanted plots carried out by G Parthasarathy and B Prasada Rao in 1965 [7.3] showed that in the Diwani areas protected tenants of 1955 continued in possession on only 55 per cent of the plots with 63.5 per cent of the area, while evictions and surrenders accounted for 25 per cent of plots with 20.8 per cent of the area, the remaining having been purchased. Here, the average size of the tenanted plots of those who continued in possession was evidently larger than that of those who were evicted; but a clearer idea of the class status of the two types of tenants would have emerged if we had information — which unfortunately was not collected — on their total operated area, at the two points of time.

The intensive study by K R Nanekar [7.4] of land reforms in Vidharbha, is valuable because it asked precisely this question, namely how much land tenants had after eviction. In the Nagpur districts of Vidharbha, 96 per cent of all sample tenancies studied ceased during the reference period 1951 to 1961, owing to surrenders and evictions. In 65 per cent of all cases, the tenant had no land left at all after tenancy ceased, and in another 20.9 per cent of cases, they had land — owned or rented from others — below 5 acres. Similarly in the Berar districts, about 88 per cent of the tenancies studied during the reference period 1951-68, were surrendered or terminated. In exactly two-thirds of these cases the tenant was left landless. This study brings out clearly that the majority of those tenants who ceased to be tenants, must have been of poor peasant or at best lower middle peasant status, since they were either landless or with very small holdings after evictions/surrenders. No direct information was collected on the operated holdings of those who remained, but we may infer that they must have been of a higher class status.



The study by B Singh and S Misra [7.1] of land reforms in Uttar Pradesh, showed that over half the sample households had no bhumidari (ownership) right over any part of their holding after reform, though provision had been made for them to buy ownership; when asked why they had failed to purchase ownership, 74 per cent of the respondents gave lack of cash as the reason. Conversely those erstwhile tenants who had purchased ownership, must evidently have been the rich peasants and perhaps some upper middle peasants who had the required investible funds. In Rajasthan, similarly, the study by Dool Singh showed that the majority of tenants — presumably of poor peasant and middle peasant status — could not acquire the superior landholding right (khatedari) owing to ignorance, lack of cash, and landlord pressure. The khatedari right remained the monopoly of the ex-jagirdars (whose land "resumed for personal cultivation" automatically became owned land) and a handful of rich peasant tenants with the required economic strength to wage litigation and pay the purchase price.

These diverse evaluation studies, to sum up, are consistent with the conclusion that the benefits to tenancy reform went mainly if not exclusively to the tenants who were already on rich peasant status before reform, and who could improve their position further by purchase of ownership right to tenanted land. Conversely the middle peasant and poor peasant tenants, making up the majority of all tenants, could not manage to even retain land under lease in many cases, but were either openly evicted or subjected to pressure leading to so-called "voluntary surrenders". There is also evidence that often the evicted petty tenants were re-engaged on unrecorded, oral leases of short duration, even where the declared aim of eviction had been "personal cultivation". In short, those tenants who most needed land and security — the poor peasant and middle peasant tenants — found it difficult owing no doubt to their very class status, to avoid getting evicted or reduced to becoming "underground" tenants, while the economically already better-off rich peasant tenants were able by virtue of their class position,

to reap some advantage from the laws.

This conclusion also helps to resolve following apparent paradox: the area under tenancy has declined, but tenancy as a problem remains as acute as before. According to the NSS data for the country as a whole the percentage of leased in to operated area has declined from over 20 per cent in 1953-54 to less than 10 per cent at present. Joshi and Narain [4] have argued that the recorded decline is a real one, since most of it is on account of larger holdings above 10 acres, whose operators cannot be passed off as agricultural labourers or farm servants by owners leasing out to them. Bardhan [5] has argued that a considerable degree of hidden tenancy has come into being so that the recorded decline in area under lease is likely to be misleading.

If we look at the matter in class terms, it becomes evident that there can be a real and substantial decline of area under lease, which is compatible with not just constancy but even an increase in the extent of petty tenancy. If it is correct that the rich peasant tenants have acquired ownership, this would mean a large fall in the total area under lease since such tenants, by virtue of the large size of their leased-in parcels, in any case accounted for the major part of all leased-in area (*vide* Table 1). In fact if we assume that largest 15 per cent minority of operational holdings, which accounted for 62.5 per cent of all leased-in area in 1953-54, succeeded in getting ownership of this leased-in area, then, everything else remaining the same, the overall percentage of total operated area leased in would show a fall from 20.3 per cent to 7.6 per cent. However, when we think of 'the tenancy problem' we are not normally concerned with such rich peasant tenants who already operate on a large scale with mainly hired labour. We mean by 'the tenancy problem', the problem of petty cultivators working with family labour for whom rented land is a substantial or major source of livelihood, and on whom therefore the rental burden falls heavily — *viz.* we have in mind the middle peasant and poor peasant tenants. Such tenants made up numerically the majority though owing to the small size of their leased-in parcels (from Table 1, 1.21 acres and 0.19

acres for the middle 25 per cent and bottom 60 per cent of operational holdings), they accounted for the minor share of tenanted area. Supposing now that at the same time that rich peasant tenants have acquired ownership leading to a fall from 20 to 7.6 per cent in operated area under lease the number of petty tenants and area leased by them has gone up by say one-third. Even if this entire increase is an open, recorded increase, the new proportion of leased-in to operated area would be 10.1 per cent, still far below the original 20.3 per cent. A *very substantial fall* in aggregate area under lease is thus perfectly compatible not just with constancy, but with a *substantial increase* in petty "problem" tenancy even where this is open and not hidden.

As long as tenancy reform laws treat 'tenants' as a blanket legal category, without taking into account the very considerable difference in class status among the tenants, we may say that even at a purely theoretical level these laws have failed to come to grips with the tenancy problem.

## VI

### Some Theoretical Problems

The classification of the peasantry using the labour-exploitation criterion is in a sense a descriptive one. In order to relate these descriptive categories to the analytical class concepts of Marxist theory, we not only need to consider the forms of exploitation in greater detail; we also need an overall view of the character of evolution of agrarian relations in India. This is beyond the scope of this paper; we can only try to indicate briefly the nature of some of the problems which arise.

(1) Category 5, the 'full-time labourers', would normally constitute an *agricultural proletariat*. However, given in Indian experience of the break-up of petty production in the colonial period without a simultaneous or sufficient growth of capitalist production in agriculture (other than the plantations, which remain a tiny enclave), it seems more realistic to regard the labourers being the outcome of a process of *pauperisation*, rather than proletarianisation. In recent years in specific sections of the landless labourers perhaps being converted into genu-



proletarian sections employed in capitalist production, but the extent and importance of this remains to be established.

There is the further point that in an intensive monsoonal or irrigated tropical agriculture such as prevails in many parts of India, some employment of hired labour characterises the middle and even poor peasants (see the positive though low hiring-in of labour figures on holdings below 10 acres in West Bengal, which are on average upper middle peasant and below in status). We estimate from information in the FMS Report for West Bengal, 1956-57, that of the total labour days hired in by all holdings, nearly one-third was on account of holdings below 10 acres. This surprisingly high figure reflects the fact that these holdings are so numerous: in spite of the rather low number of labour-days hired in per holding, the total adds up to a fair amount. The remaining two-thirds of total labour days hired in is by the rich peasants, capitalists and landlords. Thus, not all the hired labour is employed on holdings primarily relying on hired labour, though of course the major part of total hired labour is so employed.

(2) There is the symmetric problem of characterising the employers of hired labour. Three exploiting categories employ wage labour. (a) rich peasants (b) landlords (c) capitalists.

(a) The rich peasant is generally regarded as representing the capitalist tendency within the peasantry. However in India a section may, as pointed out earlier, engage more in feudal-type exploitation such as leasing out, usury, etc. At the same time another section approximates more closely to nascent capitalists.

(b) 'Landlord' has had a specific meaning in Marxist political economy; it refers to the owner of a substantial land area who leases out to tenants and appropriates rent. A landowner who cultivated directly with hired labour is *ipso facto* a capitalist.

In India however 'landlord' has been used often to denote any non-cultivating big landowner, not only one who leases out for rent, but also one who employs farm servants and labourers, or combines both. This usage has a rational basis in the specific Indian experience as regards the development of employer-labourer relations. In Europe the employer-labourer relation in agriculture developed from the break-up of petty production dur-

ing the transition from feudalism to capitalism and therefore was necessarily capitalist in character. In India however *precapitalist* employer-labourer relations have existed in agriculture long before, and well into, the period of colonial rule. The labourers typically belonged to the lowest castes and were in some form of hereditary bondage (ranging from outright chattel slavery to milder forms of tying to the land). While these relations were undoubtedly modified and put on a more monetised basis with the growth of exchange, their *precapitalist* character tended to persist in many ways. For this reason, a traditional big landowner who happens to combine leasing out with even a considerable degree of direct cultivation with farm servants, is best regarded as a landlord if such direct cultivation is characterised by small outlays in the production process and a low level of technique. For here, surplus takes the form of labour rent rather than profit, and surplus-appropriation is simply on the basis of the claim to landed property. At the same time, there may be other landlords who are making a genuine transition to capitalist production involving employment of hired labour for profit; this typically entails substantially higher outlays on higher-productivity technique: surplus is extracted mainly in the form of profit, i.e., a return on the capital advanced (and *not* mainly in the form of labour rent, i.e., merely by virtue of the monopoly of landed property).

While there should in principle be little difference of opinion on the categorisation of the peasantry we have given on the basis of the E criterion there can of course be some differences on the question of relating these categories to analytical concepts, depending on the view taken of the historical evolution of land relations. We have indicated very sketchily above our particular viewpoint that the full-time labourers in India do not yet in their entirety constitute a proletariat; and the symmetric view that every employer-labourer relation is not to be regarded as necessarily a capitalist one.

## VII

### On the 'Trend' and 'Moment' of Development of Agrarian Relations

It is a generally uncontested fact that at Independence, agriculture was characterised by the prevalence of

landlordism: not only in the zamindari areas where it might be expected but also in ryotwari areas where the agrarian structure had shown, over time, features indicating convergence to that in zamindari regions. By 'landlordism' we mean the fact that a high share of cultivated area was concentrated in the hands of big landowners who leased it out to peasants and lived on rent or combined this with extraction of labour-rent from hereditary farm servants.

This does not mean that the landlord-peasant relation was the only one. As we have seen, a considerable degree of class differentiation within the peasantry itself, existed. The data to which we have referred (Tables 1, 2 and 6) relate to the early and mid-50s, and it is hardly likely that the agrarian structure was significantly different a mere three to five years earlier. There existed a considerable degree of hiring in and out of labour within peasantry; and the lease situation was a complex one not reducible to the landlord-petty tenant relation alone. However, in the view of most political economists analysing the agrarian structure, the fact of differentiation and hence exploitative relations connecting classes *within* the peasantry, seems to have been overshadowed by the burden of landlordism on the peasantry as a whole.

The Leninist distinction between the 'moment' and 'trend' of development becomes essential here. What we are saying is that at Independence, the 'moment' of development of agrarian relations may be taken as one in which the landlords-peasantry dichotomy was the most important while other relations also existed. Or, to put the same point in slightly different words, while there existed a multiplicity of contradictions within agriculture (the contradiction between the labourer and rich peasant, the contradiction between the poor peasant and landlord, the contradiction between the poor peasant and rich peasant, to mention a few), one particular contradiction, that between *landlords and the peasantry as a whole*, may be taken as being the principal contradiction, with all other contradictions having a secondary role. The Leninist concept of the 'moment' of development refers, if we have understood it correctly, precisely to a judgment about what it is that constitutes the principal contradiction among a multiplicity of contradictions, at a given moment of time.

Then the question arises, what has



been the 'trend' of development in the quarter-century since Independence? For the agrarian structure has clearly not remained static but is in a process of change. A number of exogenous factors have been acting on the agrarian structure, the extent and nature of their impact naturally varying greatly across regions depending on varying initial conditions as well as varying degrees of implementation of the policies concerned. Among these factors have been: (a) Implementation of land reforms legislation, which has led to some redistribution within the top 15 per cent or so of land owning households, in class terms preserving the dominance of the landlords while strengthening the rich peasantry; (b) The impact of an expanding domestic market for agricultural products as a result of large-scale government outlays under the Plans from the mid-50s in particular. Given the relatively slow growth of agricultural production, agricultural prices have been rising at a faster rate than all other prices leading to the swing in the terms of trade (the "reverse scissors") in agriculture's favour since the early 60s, the profitability of agricultural production has therefore risen; (c) Technical changes introduced into agriculture by complementing the traditional pre-Independence policy of state investment in irrigation projects by encouragement of private investment in improved techniques (fertilisers, high yielding seeds, etc).

It has been argued elsewhere at length by the author — we will not recapitulate the discussion — that the net result of all these changes has been to encourage a tendency for the growth of capitalist production in agriculture. This 'trend' or tendency is extremely *narrowly based*, given the fact that landlordism has not been abolished but at best only partially modified; the tendency is also extremely *uneven* in its geographical and crop-wise incidence, the penetration of capital being hardly visible in many regions and crops while it is a marked phenomenon in others.

A question distinct from the existence of the capitalist 'trend' or tendency of development, (which is what the present author has been concerned with), is the *extent* to which it has developed. Clearly, recognition and analysis of the existence of a capitalist tendency does not in the least imply that it has *already* gone so far (or indeed is even capable of going so far) as to alter the

'moment', the principal contradiction within agriculture. (Those who have interpreted the acceptance of the objective fact of growth of capitalist production in agriculture, as equivalent to the view that 'agriculture is capitalist', evidently have never heard of the basic Leninist distinction between the 'trend' or tendency of development, and the 'moment' of development. The failure to make this distinction arises in fact, from the habit of applying the categories of formal logic to a process of change.)

Lack of space precludes a detailed discussion of the view we hold, namely that despite the growth of capitalist production the "moment" of development, the principal contradiction, has not altered. (In brief, this view follows logically as soon as we recognise the fact that landlordism has not been abolished, there has not taken place any genuinely wide-based redistribution of land; at most the forms of landlordism have been modified.) Of course the very fact of the development of capitalist production means that the content of "landlordism" today is not, and cannot be, exactly the same as at Independence.

At this point the critical reader can legitimately argue as follows: it is all very well to say that there has been a trend of development of capitalist production which has not yet gone so far as to alter the principal contradiction. What is more to the point, how far is it capable of going; can it at all go far enough under the present conditions, to make the landlord-peasantry contradiction historically obsolete at some point in the future? Or, are there any specific limits or barriers to the growth of the capitalist tendency which might prevent this?

We would answer as follows: the very fact that genuine land reforms have not taken place, and therefore landlordism on the one hand and a mass of pauperised poor peasants on the other, exist, implies that there are definite limits to the further development of the capitalist tendency. These limits can be understood by applying the Marxist theory of rent; namely, the fact that high levels of precapitalist ground rent such as continue to prevail in India, must act as a very substantial deterrent to capitalist production unless certain stringent conditions of technical change are fulfilled. The next section amplifies this argument.

## VIII

## Precapitalist Ground Rent as a Barrier to Capitalist Production

A number of authors have drawn attention to the fact that landlessness, chronic unemployment and underemployment characterises a large proportion of the agricultural working population — both the labourers and the pauperised peasants. The prevalence of surplus labour, in the sense of labour involuntarily unemployed or underemployed owing to lack of land and job opportunities, is perceived as being inimical to the growth of capitalist production. However, the precise *way* in which surplus labour inhibits capitalist production remains rather unclear. B. Chatterji has argued that it is the availability of labourers at very low wages which deters capitalist investment. Here, there is an implicit assumption that capitalist investment is labour-replacing investment, but this need not be true. Investment in irrigation, double-cropping, improved seeds, fertilisers — would all *increase* labour requirements. Low wages mean high surplus value for capitalists and far from inhibiting capitalist investment of this type, should be conducive to it provided market conditions are otherwise favourable.

It seems more fruitful to look at the matter in terms of the relation of capitalist production to precapitalist ground rent, and relate the question of labour surplus to the latter. We have already pointed out above that capitalist production cannot emerge surrounded by petty production unless the level of capitalist rent (surplus profit over and above 'normal profit') at least equals that of precapitalist rent (surplus of output value over necessary cost for petty producers). It is this fact which provides the clue to both the pattern of capitalist development to date, and the limits to it.

We know that the rents paid in India by petty producers (poor peasants and middle peasants) are extremely high. Typically rent amounts to around 50 per cent of gross output value in the case of the major staple crops such as rice, wheat, etc. (In areas of high land-productivity, e.g. the Andhra and Tamil Nadu river deltas, it may go up to 60-65 per cent.) The remainder retained by the petty producer barely covers necessary production costs including the family's subsistence. Indeed rent may eat into 'necessary cost' itself



poor peasant tenants are typically obliged to underfeed their bullocks and underfeed themselves in order to obtain the very condition for production, land on lease. This is borne out by NSS data on the paid-out costs of production of the major crops, which are found to vary between 45 and 50 per cent of the gross output value. The remaining 50-55 per cent is the "balance of output value"; if 50 per cent is given as rent, this leaves 0-5 per cent only as some return to family labour. (These are average figures for a cross-section of all holdings. Unfortunately, no break-up by farm size or tenure status is given.)

The reason for such high levels of precapitalist rent, is precisely the monopoly of landed property, consequent landlessness or near-landlessness of a very high proportion of the working population, and their struggle for a livelihood within agriculture in the absence of alternative job opportunities. Those who are landless and possess no bullocks or plough have no choice, and must work for wages, although the prevalence of unemployment and a very low wage rate implies that they barely scrape a subsistence. The poor peasant with some means of production would not, if he can possibly help it, wish to rely entirely or mainly on the market for casual labour, and would try to lease in land even if terms are very harsh, because of the limited security that land possession confers. There are two distinct points here. (a) Land possession means that through the most intensive possible labour — at the expense of lowering labour-productivity — within the constraints of the techniques open to him, the petty producer can try to maximise output and be certain of getting say 50 per cent of this which gives him a certain level of consumption. This may be higher than the mean income and consumption he can expect to get from working for wages instead. (b) Even if the mean expected income from wage work is equal to or higher than that obtainable by cultivating leased land, the latter will be preferred by the poor peasant to the extent that it involves less uncertainty, his livelihood is somewhat more under his own control compared to reliance on the labour-market. The expected mean income from wage-work, may or may not be actually obtained in a given year; and a downward deviation of

actual from expected income is not symmetrical on its effects, to an upward deviation, since it may mean starvation. (In such a situation, it is not very helpful for the peasant to be told that next year he will get a much higher income.) This is a possibility the poor peasant would wish to avoid, as indeed would the labourer if he could. Hence the payment of high hunger rents to obtain land and subsistence; rents which reflect, not the peasant's high productivity, but his near-destitute status and enforced reliance for a livelihood on those who monopolise landed property.

Such high levels of precapitalist rent, constitute a formidable barrier to the emergence and development of capitalist production, the latter would make economic sense only if it is associated with substantial technical progress of a particular type, which raises surplus per unit of land area. This is easy to see.

(1) If the capitalist producer does not own land but leases it, he must pay — assuming competition — the same high absolute rent of say Rs  $y$  per acre, as a petty producer does for a given type of land growing a given type of crop. He must also get a profit, say Rs  $x$  per acre, on the money capital, Rs  $M$  which he has at present invested on that acre of land but which he could have invested elsewhere in the economy for Rs  $x$  return. In short he must obtain a surplus of Rs  $x+y$  per acre by capitalist production where the petty producer needs to obtain only Rs  $y$  surplus per acre. This is only possible if the capitalist's outlays embody technically more advanced methods of production which give a discrete increase in surplus per acre (i.e., a discrete 'jump' in land productivity compared to the same level of labour productivity as in petty production).

(2) The argument holds as strongly even if the capitalist does not need to lease in land because he owns it; for in that case he has the option of leasing out his owned land to petty producers and obtaining precapitalist rent. He can either (i) lease out his acre for Rs  $y$  rent, and at the same time use his money-capital Rs  $M$  in any other sphere — moneylending, trading, industry, etc — to bring in an average profit of Rs  $x$ . (ii) Or, he can cultivate directly; assuming that he invests the entire money capital Rs  $M$  in cultivation on an acre, it is not enough if

the return of surplus is Rs  $x$ , comparable to that obtainable elsewhere; the return must be at least Rs  $x+y$  for direct cultivation to be at all comparable to leasing out. Once again, this will be possible only if direct cultivation involves a discrete increase in surplus per acre compared to petty production.

The important point here is that a small or gradual improvement in surplus per acre as a result of technical change is not enough to induce capitalist investment in new techniques; the technical change has to be substantial. The higher the level of precapitalist rent, the more severely does it operate as a barrier to capitalist investment, and the more drastic have to be the surplus raising effects of technical innovations for the latter to be adopted.

We can now look at the recent pattern of technical change and output expansion in India in the light of the above general theoretical considerations.

(1) If it is correct that precapitalist rent is the main barrier to capitalist investment, then it becomes immediately understandable why such capitalist investment as has been taking place over the last 10-15 years has been associated with technical change of a particular type, in brief "land-augmenting technical progress", which raises output and surplus per unit of land area. Irrigation, double-cropping, fertilisers, high-yielding seed varieties — this complex of 'new inputs' is precisely one which raises output and surplus per acre of physical land area, the only way of surmounting the rent barrier. (This does not exclude partial mechanisation and labour-replacement when the requirements of raising surplus per acre demand it.)

(2) It is also well known that the technical possibility of a large discrete 'jump' in output and surplus per acre, has been realised in the field to a much greater extent in the case of particular crops such as wheat, as compared to others, notably rice. While high-yielding rice varieties may under laboratory conditions give as sharp a rise in yield as new wheat varieties, the greater problem of controlled water-management in rice cultivation has been the main deterrent to obtaining sufficiently large, discrete increases in output and surplus per acre in practice. It is



therefore not surprising that capitalist investment has been much more in evidence in wheat production than in rice production; or, that the so-called "green revolution" of the 1960s has been primarily a wheat revolution (though signs of a minor technical breakthrough in winter rice are present in some areas).

(3) To the extent that the capitalist tendency has been concentrated on particular crops which in turn are mainly grown in particular regions, we get the again well known result that such output expansion as has taken place in recent years has shown a "crop-wise and region-wise concentration". (Thus of the total increase of 18.8 mn tons in foodgrains production between 1964-65 and 1970-71 for India as a whole more than half, 9.7 mn tons came from Punjab, Haryana and Uttar Pradesh. Of the total increase of 26 mn tons in foodgrains production over the decade 1960-61 to 1970-71, almost half or 13 mn tons was on account of wheat alone.)

(4) Finally, we can expect to find a levelling off and even decline of productive capitalist investment, once the potential of a given complex of technical changes has been realised. The accumulated surpluses of the emerging capitalists will revert to usurious money-lending, speculative trade, etc. Further productive investment will require the possibility of yet another round of technical developments which give a new discrete increase in surplus per acre. The reason for this is the following:

(a) The level of precapitalist rent itself will not remain static but will tend to rise though with a lag. Petty producers vying for land on lease will be obliged to jack up rent payments. This they can do by trying to apply the new inputs to the extent possible in their straitened circumstances, on the basis of funds borrowed from others — usually at high interest. Some if not all will succeed in raising output and surplus per acre to the extent that the new inputs are divisible (as is the case with seed, fertilisers) more intensive use can be made of underpaid family labour, and lumpy irrigation equipment does not have to be invested in either because water can be bought from state-financed irrigation projects or from richer cultivators. By not allowing their own absolute consumption levels to rise (or rise very little) as surplus per acre

rises, petty producers can succeed in paying higher rents, even after repaying the principal plus high interest on borrowed funds. In the new situation the petty producers achieve a higher yield but still continue to pay the entire increased surplus as rent (plus interest), thus raising afresh the barrier of precapitalist rent.

The levelling-off of productive investment has been in evidence for the last few years in the most advanced regions such as Haryana-Punjab; while some evidence on the raising of the absolute levels of rent paid by petty producers is available from other areas. (If rent is paid as a crop-share this

will be reflected as a higher share of the increased output going as rent. If there are legal or customary barriers to raising of the rental share, however, an effective enhancement of surplus extraction may be hidden in the form of interest extraction or even extraction of labour directly, rather than in an explicit raising of the rental share. Analytically speaking the effect is the same in either case.)

(b) Secondly, the very operation of the capitalist tendency within an unreformed agrarian structure, tends to increase economic concentration generally, and increase land concentration in particular cases. A proliferation of

## COMMISSION OF INQUIRY ON LARGE INDUSTRIAL HOUSES

### NOTICE OF PUBLIC HEARING

No. 1 (294)/73-CILIH: The Commission of Inquiry on Large Industrial Houses will hold a Public Hearing commencing from Monday, the 4th October, 1976, into matters under its terms of reference arising out of the financial assistance by:—

- (i) Industrial Finance Corporation of India;
  - (ii) Industrial Development Bank of India Ltd; and
  - (iii) Industrial Credit and Investment Corporation of India Ltd; to
- (a) Bihar Alloy Steels Ltd; and
  - (b) High Quality Steels Ltd.,
- two concerns included in the Larger Industrial House of Birla by the Industrial Licensing Policy Inquiry Committee.

The venue of the hearing is Vigyan Bhavan, New Delhi-11 (Committee Room 'C' from 4.10.1976 onwards, Committee Room 'B' from 18.10.1976 onwards, Committee Room 'C' from 22.10.1976 onwards and Committee Room 'E' from 27.10.1976 onwards). The sitting hours will be from 9.30 A. M. to 1.30 P. M. Any subsequent changes becoming necessary in the venue or sitting hours will be announced or notified at Vigyan Bhavan.

By order

(Sd/-)

V. NATARAJAN  
SECRETARY

20th September, 1976,  
Room No. 301, 'A' Wing,  
Shastri Bhavan,  
New Delhi-1.



small-scale holdings and agricultural labourers at one pole, and concentration of economic power in a minority of large-scale holdings on the other, is the result. Here the changes in the structure of land-holdings over 1961-71 in one of the most 'advanced' regions in India — Haryana — is quite striking. The average size of operated holding has declined as a result of the proliferation of holdings below 5 acres, which have gone up from only 16 per cent of all holdings to over 45 per cent in just a decade. At the same time the extent of concentration has increased: the top 20 per cent of all households ranked by area now control 59 per cent of operated area compared to 48 per cent a decade ago. (It is important to note that the extent of increase in *general economic concentration* with the top holdings is likely to be much greater than even the increase in land concentration because, as they have been investing to a greater extent and at a faster rate in raising output and surplus per acre than have medium and small-scale holdings, their share of the value of all tangible assets, of output, and surplus must have been increasing even on the basis of an unchanged share of area.)

To sum up the argument: the implication of an unreformed agrarian structure with a high degree of concentration of land and other means of production within an insufficiently expanding economy (i.e. with a very low rate of expansion of non-agricultural employment) is that there are high levels of precapitalist absolute ground rent paid by petty producers who have to make a living out of agriculture. This implies that capitalist investment in agriculture faces a formidable barrier and will only be undertaken if, for given market conditions, it can embody a complex of technically more advanced methods of production of a particular type, namely such that a substantial, discrete increase or "jump" in output and surplus per unit of land area, is possible. If this condition is satisfied, as it has been in the case of particular crops, then the rent barrier is temporarily surmounted and capitalist investment does take place. However the rent barrier reasserts itself, and is bound to do so as long as (a) small-scale petty producers continue to exist, (b) their relative numbers are swelled by the

very operation of this limited capitalist tendency, which leads to increased economic concentration in general and to increased land concentration in particular. Further productive investment and output expansion then requires yet another round of substantial technical improvements, but the scope for this, clearly is very much less than in the initial situation.

In the early 1960s it was thought by many that "land reforms can wait" (in part this was simply an acknowledgment of the *de facto* failure to implement them), for the required growth of agricultural production could be obtained by relying on that minority of rural households which had the investible funds to go in for the new techniques; in short, that encouragement to the landlords and rich peasants to turn themselves into capitalist producers, would do the job. Not only were technically improved production methods developed and disseminated mainly to these classes at initially subsidised rates, but market conditions were also extremely favourable, (and kept even more favourable than they would have been through government-guaranteed minimum procurement prices for the staples). Upto a point this strategy did bear some fruit, but only because as we have seen, the rent barrier could be temporarily surmounted in the case of particular crops. The scope for a repetition of the so-called 'green revolution' today in other crops is much more limited.

It is commonplace by now that the strategy followed since the early 1960s has been narrowly based on a small minority of cultivators (the emerging capitalists) and its gains have been correspondingly unequally distributed. If our analysis regarding the barrier of precapitalist rent is correct, we can put forward a more comprehensive and much stronger proposition: as long as land reforms remain unimplemented and there are petty

producers with not enough land, competing desperately for a livelihood, output expansion through capitalist investment will encounter the barrier of precapitalist rent; surmounting the latter will involve progressively more difficult-to-attain complexes of technical change. There is no easy way out of the impasse of low agricultural growth by following a path of capitalist development within an unreformed agrarian structure.

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Kerala State  
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Development  
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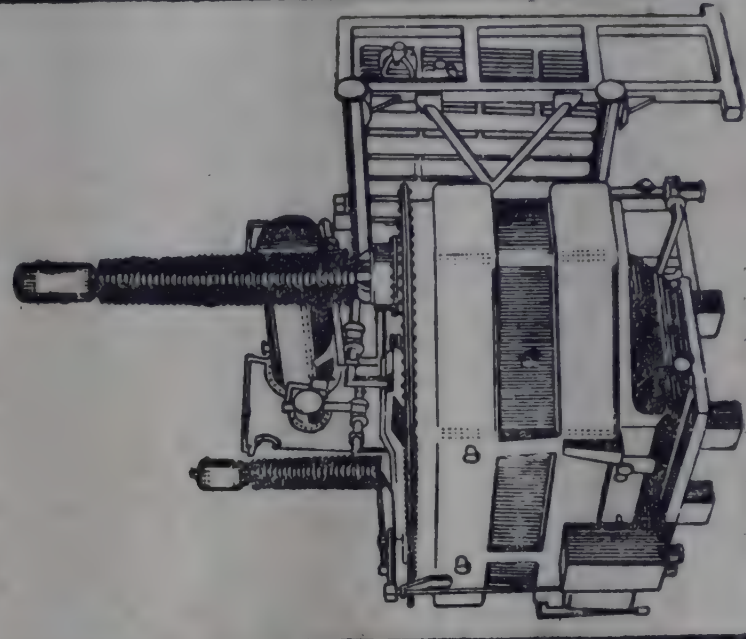
### AUDITORS

M/s. T. Venu Pillai & Co.,  
Chartered Accountants,  
Alwaye.

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- Central Bank of India, Mahatma Gandhi Road, Bombay-400 001. **3,00,000**
- The Federal Bank Limited, Alwaye. **3,00,000**
- Bhupendra Champaklal Devidas, Bhupen Chambers, Dalal Street, Fort, Bombay-400 023. **1,50,520**
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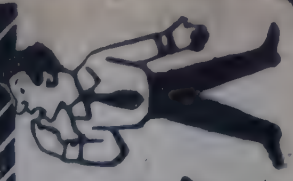
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Closing Date: 14th OCTOBER 1976  
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# Size-Productivity Revisited

Manabendu Chattopadhyay

Ashok Rudra

*In this article, the authors propose to come back to the much-debated alleged inverse relation between farm size and productivity.*

*Our discussion will be presented in four parts. In Part I, we shall try to take a view about the statistical validity of the alleged relationship, taking into account the latest statistical works of others. In Part II, we shall discuss it from fresh results, involving grouped data which are presented in this article. In Part III, we shall take yet another look at the 'cheap labour based explanation' advanced by A K Sen, with the help of fresh statistical exercises. In Part IV, we shall present our understanding of the alleged relationship where it holds and its policy implications.*

## I

IN the early stage of the discussion, most writers writing about this subject took the validity of the inverse relation for granted, without undertaking any investigations into the statistical validity of the same. Rudra is among the few who challenge the universal validity of the alleged relationship. As his views have been much misrepresented and misunderstood we may emphasise that it was never the view expressed by the author that the inverse relationship was not to be observed in *any* circumstances in Indian agriculture. Our view was that such a relationship could not be regarded as a universally valid law operating in Indian agriculture. That there were indications in the Farm Management data, themselves, that in certain areas yield per acre instead of declining with increasing size might actually be increasing. Also, that in certain cases, where an inverse relationship could be recognised to hold, it might do so among the smallest size classes of farmers but not among others. It is also our view that, in many areas, one could not possibly observe any systematic pattern of dependence between yield per acre and farm size. "There is no justification for steam-rollering such regional differences in one's hurry to make generalisations about the Indian economy as a whole" — this statement, by Rudra, in his article (Rudra, 1968b) states correctly his stand which is certainly not one of rejecting the validity of the inverse relationship in all circumstances. His cautious and conditional views were posed against the sweeping generalisations that were made by several authors in the earlier stage of the debate. Some examples are provided below.

Thus, Khusro (1968) writes: "Of particular interest are some generalisa-

tions about the relations between farm size and farm efficiency which are based upon a remarkable repetitiveness of some phenomena almost everywhere among the areas studied ...". Later he mentions as one of the generalisations: "As farm size (acreage) expands, gross output per acre declines". Similarly, A K Sen (1962) listed three results "found to be broadly valid in Indian agriculture", one of which was, "by and large, productivity per acre decreases with the size of holding". Dipak Mazumdar (1963) in his turn wrote, "The data presented by the Farm Management Survey in India have added another example to a phenomenon observed in many parts of the underdeveloped world, viz, that in peasant agriculture, as the size of farms decreases the output per acre increases". Saini (1971) wrote, "Thus, by and large, the inverse relationship between farm size and productivity is a *confirmed* phenomenon in Indian agriculture and its statistical validity is adequately established by an analysis of the *disaggregated data*" (italics added). Hanumantha Rao (1966) made such generalisation not only for yield per acre but also about some of the factors associated with it. Thus, "in all the districts studied, the percentage of cultivated to uncultivated area as well as the percentage of cultivated area cropped more than once decreased sharply with increase in the size of holding. This is because, among the factors, the percentage of holding irrigated *invariably* declines with increase in the size of holding" (italics added). Sen (1964), who was cautious enough precisely in the earlier stage to write that "The statistical basis of the observations around which all this controversy is centred is not really something that has been proved beyond the legitimate doubts of exacting statisticians", seems to lose that cau-

tion when he tries to summarise the position as late as in 1975 (Sen, 1975) in the following words, "Perhaps the only clear finding is that the size-productivity inverse relationship based on size-class average data is vindicated also by disaggregated inter-farm data from different villages in the same region considered together. But the picture is less clear for data within a village".

It is indeed surprising that Sen holds that disaggregated inter-farm data from different villages in the same region vindicate conclusions based on size-class average data. To take a view on this matter it is necessary for us to briefly recapitulate the statistical work that has been done with aggregated and disaggregated data and the conclusions drawn from them by the concerned research workers.

(1) The Farm Management reports themselves present grouped data which are not subjected to any statistical tests, and the conclusions drawn by the authorities presenting the results were quite cautious: it was the economic theorists who were prone to make generalisation. Thus the following kinds of statements occur in the study "Farm Management in India" (DES, 1966): "In some of the regions like Punjab, UP, Maharashtra, Madras, Andhra Pradesh, and Orissa, output per hectare decreases with increase in farm size" and "... yields per hectare and, therefore, gross income per hectare of paddy generally decrease as farm size increases in all the regions (except West Bengal and Andhra Pradesh where no definite trend is discernible)".

(2) Khusro did carry out the same t-tests on straight line fits to grouped data and did permit himself the generalisation cited earlier.

(3) The latest result released, of tests carried out on grouped data are those by Krishna Bharadwaj (1974a,



74b) who fitted logarithmic straight lines to such data pertaining to the earlier round of Farm Management surveys. But her conclusions by no means lend to support to any generalisations. Her cautious conclusions are: (a) "Thus the inverse relation while not supported invariably, is not rejected either". (b) "Taking the per acre yields (in physical units) of individual crops we carried out regression exercises to test the inverse relation between yield per acre and size of holding. We found that in the majority of cases there is no significant or systematic relation between the two".

(4) We ourselves undertook analysis of the grouped data on two occasions. The first set of results had been presented by Rudra in 1968(b). The second set of results have been freshly carried out by us with respect to grouped data pertaining to much later periods and presented in Table 2 in Part II of this paper. Our reservations about the universal validity of the alleged inverse relationship, based on our earlier results, are strengthened by the fresh results presented in this paper. To the best of our knowledge, nobody has till now challenged our tests based on the use of rank correlation coefficient. In this connection it may be noted that, in our work with grouped data in our paper of 1968(b), we have not used gross cropped area as the divisor for obtaining output per acre which we did in our paper of 1968(a). This we feel necessary to emphasise as other research workers have often found fault with our work for allegedly using this concept of acreage [e.g., Bharadwaj (1974a), Sen (1975)]<sup>1</sup>

We may now turn to the exercises that have been carried out with disaggregated data.

(1) The first exercise is, of course, that by A P Rao who fitted a logarithmic linear function to farm-level data all belonging to the same village. His conclusion was: "contrary to the findings of the Farm Management Studies, according to the present study productivity remained constant over all holding sizes in all the villages, which indicates that holding size has no effect on productivity". It may be noted here that Rao did not make use of the concept of gross cropped area for calculating yield per acre so that there is no reason to underestimate the importance of his results.

TABLE 1: RANK CORRELATION CO-EFFICIENT BETWEEN FARM SIZE AND TWO INDICATORS OF FARM ECONOMICS (for individual crops)

Crop(s)	State and Agricultural Year	Yield Per Hectare (Qtl)	Labour Days Per Hectare			
(1)	(2)	(3)	(4)			
Paddy	Uttar Pradesh (Muzaffarnagar)	1966-67	-0.10	-0.10		
		1967-68	-0.20	+0.30		
		1968-69	-0.60	-0.30		
	Punjab (Ferozepur)	1967-68	+0.00	-0.20		
		1968-69	+0.30	-0.10		
		1969-70	+0.60	-0.80**		
	Orissa (Cuttack)	1967-68	-0.90*	-0.90*		
		1968-69	-1.00*	-1.00*		
		1969-70	-0.80**	-0.70		
	Madhya Pradesh (Raipur)	1962-63	-0.90*	+0.10		
		1963-64	+0.30			
		1964-65	-0.10			
	Andhra Pradesh (Cuddapah)	1967-68	+0.50	-0.90*		
		1968-69	-0.30	NA		
		1969-70	-0.80**	-0.70		
	Kerala (Alleppey and Quilon)	1962-63	-0.07	NA		
		1963-64	+0.89 <sup>t</sup>	NA		
		1964-65	+0.00	NA		
	West Bengal (Hooghly)	1970-71	+0.28	NA		
		1971-72	+0.67 <sup>tt</sup>	NA		
		1972-73	-0.76**	NA		
	Gujarat (Surat and Bulsar)	1966-67	-0.50	NA		
	Paddy (improved)	West Bengal (Hooghly)	1970-71	+0.43	NA	
			1971-72	+0.38	NA	
			1972-73	-0.57	NA	
		Punjab (Ferozepur)	1969-70	-0.40	NA	
		Paddy (different varieties):	Sali	Assam (Nowgong)	1968-69	+0.00
	1969-70			-0.80**	NA	
Bao	—do—		1968-69	-0.90*	-1.00*	
			1969-70	-0.90*	NA	
Ahu	—do—		1968-69	-0.50	-0.80**	
			1969-70	-0.30	NA	
Kuruvai	Tamil Nadu (Thanjavur)		1967-68	-0.60	NA	
			1968-69	+0.60	NA	
			1969-70	-0.70	NA	
Samba CC—25	—do—		1967-68	-0.10	NA	
			1968-69	+0.00	NA	
			1969-70	-0.10	NA	
Thaladi CC—23	—do—		1967-68	+0.00	NA	
			1968-69	+0.40	NA	
			1969-70	+0.90 <sup>t</sup>	NA	
Virippu	Kerala (Alleppey and Quilon)		1962-65	NA	-0.30	
	Mundakan		—do—	1962-65	NA	-0.10
			Punja	—do—	1962-65	NA
Wheat (desi): irrigated	Uttar Pradesh (Muzaffarnagar)		1966-67	-0.50	-1.00*	
			1967-68	+0.10	-0.60	
			1968-69	-0.70	-0.60	
	Unirrigated		—do—	1966-67	NA	-0.90*
Wheat (desi)	Punjab (Ferozepur)		1967-68	+0.20	-1.00*	

(Continued overleaf)



(2) Rao's conclusions were confirmed by Rudra (1968b), who also used disaggregated data referring to farms within the same village. The author tested a larger number of observations and used statistical methods which he still thinks are superior to the regression method used by all the others. However, considering that he made use of gross cropped area for calculating output per acre — a procedure that has been the object of much criticism from other research workers — we do not propose to take into account the results of this exercise in our present arguments.

(3) C H H Rao, Saini, and Usha Rani undertook analysis of farm-level observations taken from Farm Management Survey reports. It may be noted that these observations were not confined to single villages but were drawn from a number of villages in each case. While C H H Rao and Saini permitted themselves the conclusions that have been quoted earlier in para 3, Usha Rani was more cautious and her conclusions are conditional as exemplified by the following statements.

- "Hence one can even conclude that yield per acre remains constant over different size groups of farms".
- "Hence no firm generation can be made about the variation of intensity of cropping over different size groups".
- "Hence it can be said that there are no significant variations in the inputs per acre over different size groups of farms".

It may be mentioned, here, that Usha Rani selected only IADP districts with a view to finding out if there were any differences in this matter in the more technologically advanced areas.

(4) The most voluminous work that has been undertaken on this problem is that by Bhattacharya and Saini (1972). In order to eliminate the effects given rise to by inter-village variations, they took Farm Management data but considered the data for different villages separately and attacked them in all possible manner. Some students of the subject have persuaded themselves that Bhattacharya and Saini have definitively established the validity of inverse relation obtained between farm size and productivity. Far from it, Bhattacharya and Saini considered only two districts — viz Muzaffarnagar and Ferozepur — and what they have to say is best said in their own words as follows:

TABLE 1: CONTINUED

Crop(s)	State and Agricultural Yea	Yield Per Hectare (Qtl)	Labour Days per Hectare
(1)	(2)	(3)	(4)
Wheat (Mexican)	West Bengal (Hooghly)	1968-69	+0.90 <sup>t</sup>
		1969-70	—0.10
		1970-71	—0.14
		1971-72	—0.24
		1972-73	+0.05
	Uttar Pradesh (Muzaffarnagar)	1966-67	—1.00*
		1967-68	—0.10
		1968-69	—0.70
		1967-68	+0.30
		1968-69	+1.00 <sup>t</sup>
Sugarcane: planted	Uttar Pradesh (Muzaffarnagar)	1966-67	—0.10
		1967-68	—0.90*
		1968-69	+0.90 <sup>t</sup>
		1966-67	+0.50
		1967-68	—0.70
	ratoon —do—	1968-69	—0.10
		1966-67	+0.50
		1967-68	—0.70
		1968-69	—0.10
		1966-67	—0.50
Jute	West Bengal (Hooghly)	1970-71	+0.07
		1971-72	—0.07
		1972-73	—0.10
	Assam (Nowgong)	1968-69	—0.80**
		1969-70	—0.70
	Cotton (desi)	1967-68	+0.60
		1968-69	+0.00
		1969-70	—0.20
	Gujarat (Surat and Bulsar)	1966-67	—0.70
		1967-68	+0.40
Cotton (American)	Punjab (Ferozepur)	1968-69	+0.10
		1969-70	+0.80 <sup>tt</sup>
	Uttar Pradesh (Muzaffarnagar)	1966-67	+0.00
		1967-68	+0.70
		1968-69	—0.50
	Punjab (Ferozepur)	1967-68	—0.40
		1968-69	+0.30
		1969-70	—0.80**
	Maize (desi)	1967-68	—0.40
		1968-69	+0.30
Gram	Uttar Pradesh (Muzaffarnagar)	1966-67	+0.70
		1967-68	+0.70
		1968-69	—0.60
	Orissa (Cuttack)	1968-69	+0.50
		1969-70	+0.30

(Continued on next page)



"The negative correlation between farm size and productivity is, therefore, clear for this region (Muzaffarnagar) in the sense that such correlation is observed within most of the sample villages and could not have arisen due to the aggregation over villages" (parenthesis added).

"But, on the whole, the size productivity correlation is not at all clear for this region (Ferozepur)" (parenthesis added).

This presumably forms the basis of Sen's contention about the picture being not clear within a village. Krishna Bharadwaj, however, writes erroneously that "Saini and Bhattacharya (1972) using data on individual holdings reported statistically significant inverse relation in the majority of cases they studied".

Yet another testing, carried out with data not belonging to Farm Management Surveys, is that of Nirmal Chandra (1974). He carried out tests for the hypothesis that value of output per acre and labour input per acre depend on farm size, mode of labour employment, and tenancy. He carried out two different exercises. One was a three-way analysis of variance, where the three factors were (1) different farm sizes; (2) farms having more than half share of family labour in total human labour and less than half of family labour in total human labour; and (3) farms having more than half the land leased in and less than half the land leased in. He also carried out regression analysis with these three factors treated as variables. His results from these two lines of analysis are not quite consistent with each other, not very clear. On the basis of his analysis of variance, he writes: "The results are really striking; none of the main factors is significant at all and there is no exception to this proposition". This, however, is not borne out by his regression analysis for he indicates quite a few of his regression co-efficients to be turning out as significant.

Most of the results that we have discussed above were based on tests of significance for the regression co-efficients of simple linear regression fits in two variables. Thus A P Rao (1967), Saini (1971), Usha Rani (1971), C H H Rao (1966), and Bhattacharya and Saini (1972), all assume the following form:

$$\log Y = \log A + B \log X$$

where Y is value of output and X is farm size. Whereas Bharadwaj (1974a,

Crop(s)	State and Agricultural Year		Yield Per Hectare (Qtl)	Labour Days Per Hectare
(1)	(2)		(3)	(4)
Potato	West Bengal (Hooghly)	1970-71	+0.48	NA
		1971-72	+0.83 <sup>t</sup>	NA
		1972-73	-0.33	NA
	Orissa (Cuttack)	1968-69	-0.90*	NA
		1969-70	-0.90*	NA
Jowar (unirrigated)	Andhra Pradesh (Cuddapah)	1967-68	+1.00 <sup>t</sup>	+0.90 <sup>t</sup>
		1968-69	+0.90 <sup>t</sup>	NA
		1969-70	NA	-0.80**
Bajra (irrigated)	Andhra Pradesh (Cuddapah)	1967-68	-0.90*	-0.50
		1968-69	-0.40	NA
		1969-70	+0.10	-0.60

Note: In obtaining yield per hectare, we have used net cultivated area as divisor.

\* 1 per cent significant in the negative tail area;

\*\* 5 per cent significant in the negative tail area;

<sup>t</sup> 1 per cent significant in the positive tail area;

<sup>tt</sup> 5 per cent significant in the positive tail area;

NA Not Available.

1974b) uses the same form but interprets Y as value of output per acre. Khusro (1968) alone dispenses with logarithmics and uses the simple form:

$$\frac{Y}{X} = A + B X$$

where Y and X are as before. None of these research workers, however, gave any justification whatsoever for the forms assumed by them. They seem to be unaware that the conclusions drawn by them on the basis of the 't-tests' carried out by them for the significant difference of the regression co-efficient from zero is dependent on the assumption that the regression relations assumed by them are valid. The rank correlation tests made use of by us involve no assumptions whatsoever about the mathematical relation between Y and X.

A detailed discussion of this point was presented in Rudra's article (1968b). Nobody has refuted them, but nobody excepting Bhattacharya and Saini have been prevented from continuing to make use of arbitrary functional forms.

A second statistical point we would like to make here is about the preponderance of negative signs in the regression co-efficients or rank correla-

tion co-efficients. Bhattacharya and Saini write about this phenomena in the results of Rudra (1968b): "However, too many of his rank correlation co-efficients were negative and any overall test would give a significant verdict".

Bhattacharya and Saini (1972) are certainly in the right and they are entirely justified in carrying out pooling of tests. However, this ought not to be construed as an argument against Rudra, as one might get the impression from the way it is cited in (Sen 1975). For, Rudra himself pointed out the role that pooling of tests can be made to play in the following words:

"While the test results are significant only in a few cases which rule out any generalisations, it is seen that with all the variables excepting net profit per hectare, there is a preponderance of the negative sign attached to the rank correlation co-efficient. It may be asked quite legitimately: 'among the non-significant co-efficients, why is there an uneven distribution of positive and negative signs? Can the preponderance of the negative signs be without some significance in their totality?' "

It is, however, necessary to have a proper appreciation of what a pooled test implies. If there are n different independent tests with null hypotheses





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TABLE 2: RANK CORRELATION CO-EFFICIENT BETWEEN FARM SIZE AND SOME INDICATORS OF FARM ECONOMICS

(farm business as a whole)

State(s) and Regions		Total Output Per Hectare (Rs)	Total Input Per Hectare (Rs)	Labour Input Per Hectare (days)	Average Productivity of Labour (Rs)	Percentage of Irrigated to Total Cultivated Area	Intensity of Cropping	Material Input Per Hectare (Rs)
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)
1 Tamil Nadu (Thanjavur)	1967-68	-0.90*	-0.90*	-0.90*	+0.50	-0.90*	-1.00*	NA
	1968-69	-0.70	-1.00*	-1.00*	+0.90 <sup>t</sup>	-0.60	-0.20	
	1969-70	-0.70	-1.00*	-0.70	+0.90 <sup>t</sup>	-0.60	-0.70	
2 Andhra Pradesh (Cuddapah)	1967-68	-0.90*	-0.90*	-1.00*	+0.90 <sup>t</sup>	-0.90*	-0.90*	-1.00*
	1968-69	-0.30	-0.90*	-0.90*	+0.80 <sup>tt</sup>	-0.90*	-1.00*	
	1969-70	-0.30	-0.90*	-0.90*	+1.00 <sup>t</sup>	-0.80**	-0.60	
3 Kerala (Alleppey & Quilon)	1962-63	-0.25	-0.93*	-0.61	+0.14	+0.86 <sup>t</sup>	NA	-0.64
	1963-64	-0.25	-0.93*	-0.96*	-0.93*	+0.96 <sup>t</sup>	NA	
	1964-65	-0.43	-0.96*	-0.93*	+0.93 <sup>t</sup>	+0.96 <sup>t</sup>	NA	
4 Uttar Pradesh (Muzaffarnagar)	1966-67	-0.70	-1.00*	-1.00*	+0.60	+0.30	-0.70	-1.00*
	1967-68	-1.00*	-1.00*	-0.80**	+0.80 <sup>tt</sup>	+0.30	-0.90*	
	1968-69	-0.70	-1.00*	-0.90*	+0.80 <sup>tt</sup>	+0.30	-0.90*	
5 Punjab (Ferozepur)	1967-68	+0.90 <sup>t</sup>	-1.00*	-0.90*	-0.10	-0.30	-0.90*	+0.90 <sup>t</sup>
	1968-69	+0.10	-0.80**	-0.90*	+0.70	-0.80**	-1.00*	
	1969-70	-0.30	-1.00*	-1.00*	+1.00 <sup>t</sup>	-0.60	-0.90 <sup>a</sup>	
6 Madhya Pradesh (Raipur)	1962-63	-0.90*	-1.00*	-0.90*	+0.90 <sup>t</sup>	-0.60	-1.00*	-0.80**
	1963-64	-0.50	-0.90*	-0.60	-0.30	-0.10	-0.20	
	1964-65	-0.80**	-0.60	-0.60	-0.70	-0.80**	-0.90*	
7 Orissa (Cuttack)	1967-68	-0.90*	-1.00*	-1.00*	+1.00 <sup>t</sup>	-0.50	-0.90*	-0.90*
	1968-69	-1.00*	-0.80**	-0.90*	+0.80 <sup>tt</sup>	-0.10	-0.90*	
	1969-70	-1.00*	-1.00*	-0.90*	-0.20	NA	-0.70	
8 West Bengal (Hooghly)	1970-71	+0.14	-0.24	-0.81**	+0.74 <sup>tt</sup>	0.83**	-0.71**	-0.22
	1971-72	+0.62	+0.26	-0.79**	+0.93 <sup>t</sup>	-0.69**	-0.67**	
	1972-73	-0.52	-0.52	-0.83**	+0.43	-0.69**	-0.81**	
9 Assam (Nowgong)	1968-69	-1.00*	-0.90*	-0.90*	+0.20	NA	-1.00*	-1.00*
	1969-70	-1.00*	-1.00*	+0.30	-0.90*	NA	-1.00*	
10 Gujarat (Surat and Bulsar)	1966-67	+0.00	-0.90*	-0.90*	+0.90 <sup>t</sup>	+0.60	NA	NA

Note: In obtaining output per hectare, we have used net cultivated area as divisor.

\* 1 per cent significant in the negative tail area ;

\*\* 5 " " " " " " " " ;

<sup>t</sup> 1 " " " " " " positive " " ;

<sup>tt</sup> 5 " " " " " " " " ;

NA Not Available

$H_1, H_2 \dots H_n$ , each of which is found to be non-significant, whereas the result of a pooled test is significant, the implication is that *at least one* of the null hypotheses has to be rejected. In our particular case, the preponderance of negative signs in our rank correlation co-efficients only means that the negative relation must be significant *at least in some of the cases*. It definitely does not mean that the negative relations is significant *in all the cases*. But that is precisely our view — viz, that the negative relation may hold in certain parts of the country at certain times but not everywhere and not at all times.

A third statistical point we wish to make here is that a significant inverse

relation between size and productivity does not necessarily mean that the relationship holds in all ranges of the size variable. Thus if  $Y$  decreases with  $X$  in a certain range of value of  $X$ , but does not depend on  $X$  in any systematic fashion for other values of  $X$ , then it is all the same quite likely that in fitting a curve one would get a downward slope or in carrying out rank correlation test one would get a negative rank correlation. In either case, if one gets negative values — but not significantly different from zero when tested individually — one would be justified in suspecting precisely this: that the inverse relationship holds in certain ranges of  $X$  but not in others. This phenomenon, if

true, is of great policy significance as we shall see in Part IV.

It is our considered view that an inverse relationship holding over the whole size range of  $X$  would be a rather exceptional phenomenon. Diagrams 1.1 and 1.2 suggest that this may be true for the states of Orissa (Or), Tamil Nadu (TN), Assam (As), Uttar Pradesh (UP), and Madhya Pradesh (MP). In most cases where there is the negative association, it may be expected to hold only for small size classes. More detailed discussion on this point is presented in Part II of this paper. As such, there is no basis whatsoever for generalising any relationship for all size classes e.g. like the following by C H H Rao:



"It is evident from the findings of the Farm Management Studies that inputs and output per acre decline consistently with size for holdings above 10 acres" (Rao, 1966).

We may now consider the effect of aggregation over, or pooling of data pertaining to, different villages. It is quite clear that such pooling or aggregation can falsify the nature of dependence of productivity on farm size in both directions. Thus, if within a single village, productivity of land is invariable with respect to farm size but if the productivity of land is different in different villages and if the villages with higher productivity of land have small average farm sizes, then putting together data from different villages would reveal a spurious inverse relationship. If, on the other hand, average productivity of land is the same in every village and if within each village the inverse relationship holds, then if the different villages have got different average ranges of farm sizes, the intra-village inverse relationship would get obliterated in the process of pooling of inter-village data. Thus, use of such data may be expected to give highly misleading results. We have seen, before, that the few exercises that have analysed data separately for different villages [e.g. the works of A P Rao (1967), and Bhattacharya and Saini (1972)] lend little support to the inverse relationship hypothesis. In this connection, one may wonder why then we have ourselves dealt with grouped data in Tables 1 and 2 in Part II. Our answer is that our purpose in presenting these results is the same as that of Rudra (1968a, 1968b) — merely to show that the *prima facie* arguments that were made in the Farm Management reports and by the earlier batch of research workers on the basis of grouped data cannot be validly drawn from those data. We now turn to a discussion of these results.

## II

Presented in Tables 1 and 2 are the results of application of rank-correlation tests to hypotheses regarding the declining tendency with regard to size of output per hectare of all crops, a few selected individual crops, as well as certain other factors which have been suggested as explaining the behaviour of output per hectare. The tests have been carried out on exactly the same line as those carried out by Rudra in

TABLE 3: PROPORTION OF H-FARMS AND F-FARMS OVER SIZE CLASSES FOR PUNJAB: 1967-68 TO 1969-70

Size Classes (hectares) (1)	H-Farms (2)	F-Farms (3)	F-H Farms (4)
0-6	0.0000	0.2673	0.7327
6-9	0.0227	0.0682	0.9091
9-14	0.1273	0.0455	0.8272
14-24	0.1504	0.0354	0.8142
24 and above	0.3947	0.0000	0.6053
All	0.1067	0.0933	0.8000

TABLE 4: PROPORTION OF H-FARMS AND F-FARMS OVER SIZE CLASSES FOR ASSAM: 1968-69 TO 1970-71

Size Classes (hectares) (1)	H-Farms (2)	F-Farms (3)	F-H Farms (4)
0.01-1.25	0.0000	0.5294	0.4706
1.26-2.50	0.0000	0.4752	0.5248
2.51-5.00	0.0372	0.2977	0.6651
5.01-7.50	0.0233	0.3023	0.6744
7.51 and above	0.1176	0.2941	0.5883
All	0.0244	0.3711	0.6045

TABLE 5: PROPORTION OF H-FARMS AND F-FARMS OVER SIZE CLASSES FOR WEST BENGAL: 1971-72 AND 1972-73

Size Classes (hectares) (1)	H-Farms (2)	F-Farms (3)	F-H Farms (4)
0.01-0.50	0.1982	0.1982	0.6036
0.51-1.00	0.2353	0.2206	0.5441
1.01-1.50	0.1111	0.1944	0.6945
1.51-2.00	0.2727	0.0909	0.6364
2.01-3.00	0.1905	0.1905	0.6190
3.01-4.00	0.4286	0.0000	0.5714
4.01-6.00	0.0000	0.0000	1.0000
6.01 and above	0.3333	0.0000	0.6667
All	0.2133	0.1800	0.6067

his 1968 (b) paper.

We shall start by taking a look at the results presented in Table 1 regarding yield per hectare and labour input per hectare for individual crops. It is seen that one cannot discover any tendency of yield per hectare decreasing with farm size on the basis of these data. The rank correlation co-efficients are mostly non-significant and they are also not preponderantly of any one sign. For most of the crops, there are about as many negative signs as positive ones. The rank correlations that are significant are also obtained quite positive. Thus, for paddy, out of 41 rank correlation co-efficients, as many as 71 are positive of which 3 are significantly so. Of the negative rank correlation co-efficients a larger number, viz, 9 are significant. For wheat, 8 co-efficients are negative with only one significant, as against 7 positive co-efficients of which 3 are significant. For cotton, there are 5 positive co-efficients, as against 2 negative ones. Only one positive coefficient is signi-

ficant, whereas there is no significant negative co-efficient. The same pattern may be discerned for the different individual crops, and we need not any further paraphrase the Table. We have no hesitation in drawing the conclusion that, output per hectare decreasing with farm size, certainly does not hold true for individual crops. There may be cases where a decreasing tendency holds; there may be other cases where an increasing tendency holds; and in the rest there is no discernible systematic pattern. In any case, there is no scope for propounding a general law.<sup>2</sup>

It is, however, interesting to note from the same Table that, when it comes to labour input per hectare, there are strong indications that even for individual crops smaller farms by and large apply labour with a greater intensity. There is a preponderance of negative signs among the rank correlation co-efficients, and quite a good proportion of them are statistically significant. Taking these two results



TABLE 6

State (Region)	Years	Hypothesis H <sub>1</sub> :	Hypothesis H <sub>2</sub> :	Hypothesis H <sub>3</sub> :
		Labour Intensity Higher for F-Farms	Output Per Hectare Higher for F-Farms	Proportion of H-Farms Higher for Larger Farm Size Groups
(1)	(2)	(3)	(4)	(5)
Punjab (Ferozepur)	1967-68 to 1969-70	Rejected (no distinct pattern)	Rejected (O/A higher for H-farms)	Confirmed
Assam (Nowgong)	1968-69 to 1970-71	Undecided (no distinct pattern)	Undecided (no distinct pattern)	Confirmed
West Bengal (Hooghly)	1971-72 and 1972-73	Confirmed for large farm sizes, rejected for small farm sizes	Confirmed for large farm sizes, rejected for small farm sizes	Confirmed

Note : (1) O/A : Value of output per net area ; L/A : Input of labour per net area.

- (2) Comparison of O/A and L/A as between F-farms and H-farms has been carried out graphically; we have noted 'confirmed' when the graph for H-farms lies below that for F-farms for almost all values of A; and 'rejected' when it does not do so. The second case can be of two kinds: either the curves for H-farms lie above that of those for F-farms, or they do not reveal any clear pattern.

together, we have to draw the following conclusions. Smaller farms in almost all areas seem to devote a greater amount of labour per hectare of land not only for cultivating more crops on the same land but even for looking after a single crop. However, this greater amount of labour does not result in higher production. Presumably, the larger farms while devoting less labour apply capital and other non-labour inputs at a higher rate so as to obtain the same amount of production or more than the smaller farms.

We now turn to results pertaining to all crops presented in Table 2.

(a) The output per hectare for all crops is negatively associated with size in all states considered — other than Gujarat, Punjab and West Bengal. We would like to emphasise that it would be quite wrong to think that any decreasing tendency operates also in Gujarat (Guj), West Bengal (WB) and Punjab (Pu) on the basis of any pooling of tests. (We have already discussed the proper significance of pooling of test results in Part I of this article.) It may be noted here that this indicates an important change in the agriculture of West Bengal and Punjab, between the mid-fifties and the late sixties and early seventies; for, as was noted in our earlier paper [Rudra (1968b)], the association between output per acre for all crops and size of farm was significantly negative in these two states in the mid-fifties.

(b) However, among the states indicating negative association only in Tamil Nadu, Uttar Pradesh, Madhya

Pradesh, Orissa and Assam, can one talk of the tendency (for output per hectare to diminish with farm size) to operate all over the size range. In Andhra Pradesh, it seems to operate only among the smallest sizes; in Kerala, the tendency operates only beyond 20 hectares; in Madhya Pradesh indications are that the tendency becomes reverse from 5 hectares onwards.

(c) Labour input per hectare is seen to be negatively associated with farm size in all the states and, with the exception of Madhya Pradesh and Assam, seems to operate over the entire size range. In these two latter cases, the tendency becomes dampened for large size groups.

(d) Intensity of cropping is negatively associated with size in all the states for which information is available. An important case, for which information is not available on this point, is Kerala for which we have reason to believe this tendency does not hold in view of our findings on irrigation discussed in the next para. The situation in respect of intensity of cropping has not changed between the mid-fifties and the late sixties and early seventies.

(e) Incidence of irrigation is negatively associated with size in many a state, but there are important exceptions. The most important exception is Kerala: the association was significantly positive in the mid-fifties, and it has remained so in the early sixties. The proportion of land irrigated is negatively associated also in Maharashtra, Rajasthan and Gujarat. In Uttar

Pradesh, the negative association was highly significant in the mid-fifties, but the association became moderately positive in the mid-sixties. We would like to emphasise again that no kind of pooling of tests would validate a negative association between incidence of irrigation and size, in such cases as we have mentioned above, where it is found not to hold when taking individually.<sup>3</sup>

(f) Total input per hectare is negatively associated with farm size in all the states. This was so in the mid-fifties, and it has not changed after the so-called green revolution. It should be borne in mind that total input here is the value of all materials and labour inputs arrived at by carrying out various imputations by questionable methods. Some other workers have considered bullock labour separately.<sup>4</sup> We have on our part considered the total value of material inputs, and it may be seen that the intensity of application declines with size in many a case, but not everywhere or always. A notable exception is Punjab where the application of material inputs per hectare in the post green revolution period goes up with farm size.

### III

It is not our purpose in this paper to discuss and evaluate the very many explanations that have been forwarded by different research workers for the alleged inverse relationship. But we have some fresh results to present, with the help of which one may test the validity of the one explanation that has been the occasion of a great deal of theoretical



TABLE 7

State (Region)	Years	Hypothesis H <sub>1</sub> :	Hypothesis H <sub>2</sub> :	Hypothesis H <sub>3</sub> :
		Higher the Proportion of Family Labour to Hired Labour, Higher the Intensity of Application of Human Labour as a Whole (L/A increases with Lf/L)	Higher the Proportion of Family Labour to Hired Labour, Higher the Productivity of Land (O/A increases with Lf/L)	Higher the Proportion of Family Labour to Hired Labour, Lower the Productivity of Labour (O/L decreases with Lf/L)
(1)	(2)	(3)	(4)	(5)
Punjab (Ferozepur)	1967-68 to 1969-70	Confirmed	Rejected (O/A goes down slightly with Lf/L)	Confirmed
Assam (Nowgong)	1968-69 to 1970-71	Confirmed	Confirmed (O/A goes up slightly with Lf/L)	Rejected
West Bengal (Hooghly)	1971-72 and 1972-73	Rejected	Rejected (no distinct pattern)	Confirmed

discussions — viz, 'the Cheap Labour based Explanation' advanced by A K Sen (1962, 1964). The results presented in this paper may be treated as a follow-up of the results that were presented by one of the authors in an earlier paper (Rudra, 1973). The explanation is a composite one, involving not one but a number of hypotheses. Thus we suppose the explanation can be broken up into the following component parts :

Hypothesis H<sub>1</sub> : Farms employing exclusively family labour use labour more intensely than farms based exclusively on hired labour.

Hypothesis H<sub>2</sub> : Higher input per acre of human labour in the farms based exclusively on family labour results in higher output per acre on such farms.

Hypothesis H<sub>3</sub> : Larger the farm size higher the proportion of farms based exclusively on hired labour.

It is quite clear that, if farms were either exclusively based on family labour (farms of type F) or exclusively based on hired labour (farms of type H) and if the three hypotheses formulated above hold true, then indeed output per acre would decrease with farm size increasing. So, one way of testing the validity of the cheap labour hypothesis would be to test separately for the three hypotheses. In this connection, two important points of theory require to be stated even at the cost of repeating some earlier writers.

(1) Hypothesis H<sub>1</sub> has been so formulated as to imply the marginal productivity of labour in farms of type F to be the same for a given volume of input of labour as that in a farm of type H. Thus, as is by now very familiar, the argument is presented in terms of a

marginal productivity curve which is assumed to be the same, both for H farms and F farms. Assuming that H farms employ labour up to the point of intersection of the line representing wage rate with the marginal productivity curve, and that F farms employ labour beyond that point, it is concluded that

- Farms employ labour more intensely than H farms;
- thereby they produce more of output per acre and,
- this is done at the cost of a lower average labour productivity.

However, there is no justification for assuming the same marginal productivity curve for F farms and H farms.<sup>5</sup> If any one of these two types of farms use more of capital or other non-labour inputs or enjoy any other benefits, one of the curves would be above the other. In case the curve for H farms is above that of F farms, the latter may not give rise to higher output per acre even while employing more labour per acre. On the other hand, if the curve for F farms is higher than that for H farms, by virtue of better management, better soil quality, etc, as have been suggested by many participants in the discussion, higher output per acre in F farms would result even if there be no higher use of labour in F farms.

(2) The second point is: it is not true that farms are exclusively either of the type F or of the type H. As a matter of fact, most farms in India — even very small ones — employ a combination of family labour and hired labour (we shall call then F-H farms). Some of the critics of the cheap labour based explanation (e.g, Dipak Mazumdar, 1965; C H H Rao, 1966; Bhagwati and Chakravarty, 1971) have pointed

this out and argued that the opportunity cost of family labour must be the same as hired labour in farms which employ such a combination. Sen, replying to Dipak Mazumdar's argument wrote: "This argument overlooks the fact that the data presented by the Farm Management Surveys are size-classes averages and do not state the position of any individual holding. Just because in the average data it is found that, in each class, a certain amount of hired labour is used, it does not follow that all or even the bulk of the farms in the smaller size-groups use hired labour at the margin" (Sen 1964).

It would appear from Sen's reply that he proposes to rely on the fact of smaller farms having a higher proportion of farms of type F. Even if farms that employ a mixture of family labour and hired labour — i.e, F-H farms — were to price the mixed human labour employed by them in the same way as farms of type H, Sen's argument would hold all the same as long as the proportion of F farms would decline with farm size increasing. However, the proportion of the farms of the type F is negligible in the higher size groups and not very high even in the smallest size groups — so that their labour utilisation pattern cannot provide a firm basis for an explanation for the alleged inverse relation between size and productivity over the entire range of size classes. (Tables 3, 4 and 5.)

We however, do not think that even for mixed farms employing family labour as well as hired labour, the market wage rate can be treated as the opportunity cost of family labour. For, family labour and hired labour under Indian conditions are not substitutes.



human labour as a whole cannot be treated as a homogeneous commodity for which a single marginal productivity curve can be drawn. On the other hand, it is difficult to think in terms of drawing for the same farm two or more separate marginal productivity curves for hired labour and family labour of different kinds, because of the operation specific nature of the different kinds of human labour and the fixed complementary relations that hold between them.<sup>6</sup>

However, it appears to us that, if forms of type F-H would value family labour at a lower price than hired labour, then the 'cheap labour' based explanation would require to be restated for such farms in terms of the following component hypotheses.

Hypothesis  $H_4$ : Higher the farm size (of type F-H), higher the proportion of hired labour to family labour.

Hypothesis  $H_5$ : Higher the proportion of family labour to hired labour, higher the intensity of application of human labour as a whole.

Hypothesis  $H_6$ : Higher the input of human labour (whatever its composition in terms of hired labour and family labour), higher the output per acre.

Hypothesis  $H_7$ : Higher the proportion of family labour to hired labour, higher the productivity of land.

The corollaries to the above hypotheses — given rise to by the assumption of declining marginal productivity of labour implicit all through in this line of discussion — would be as follows:

Hypothesis  $H_8$ : Higher the proportion of family labour to hired labour, lower the productivity of labour.

Hypothesis  $H_9$ : Higher the farm size, higher the productivity of labour.

We shall now present some results of subjecting the above hypotheses to some statistical examinations, carried out with the help of farm level observations, which refer to certain selected areas and certain selected time points. As such, our results do not claim any definitive refutation or confirmation of the hypotheses for the country as a whole. (It has to be borne in mind, however, that practically no evidence has been put forward by anybody in support of the more crucial component parts of the 'cheap labour based explanation'. The data that we have used for this purpose are the disaggregated farm level observations, collected by the Farm Management Surveys of Punjab, Assam, and West Bengal. Hypothesis  $H_9$  is based

TABLE 8

State (Region)	Years	Hypothesis $H_9$ : Higher the Farm Size, Higher the Productivity of Labour
(1)	(2)	(3)
Tamil Nadu (Thanjavur)	1967-68 to 1969-70	Rejected
Andhra Pradesh (Cuddapah)	1967-68 to 1969-70	Confirmed
Kerala (Alleppey and Quilon)	1962-63 to 1964-65	Confirmed
Uttar Pradesh (Muzaffarnagar)	1966-67 to 1968-69	Confirmed
Punjab (Ferozepur)	1967-68 to 1969-70	Confirmed
Madhya Pradesh (Raipur)	1962-63 to 1964-65	Rejected
Orissa (Cuttack)	1967-68 to 1969-70	Confirmed
West Bengal (Hooghly)	1970-71 to 1972-73	Confirmed
Assam (Nowgong)	1968-69 to 1969-70	Rejected*
Gujarat (Surat and Bulsar)	1966-67	Confirmed

Note: \*Labour productivity strongly decreases with farm size.

on aggregated data, collected from the different reports of Farm Management Surveys.

The conclusions with respect to  $H_1$ ,  $H_2$  and  $H_3$  are presented in a tabular form in Table 6. Similarly the conclusions with regard to  $H_5$ ,  $H_7$ ,  $H_8$  and  $H_9$  are presented in Tables 7 and 8. The hypotheses  $H_4$  and  $H_6$  seem to be confirmed for all the cases. In each Table, against each body of data, the different hypotheses have been indicated as confirmed, *refuted* or *undecided* (i.e., neither refuted nor confirmed). The inferences have been drawn without taking resort to any statistical tests but by merely resorting to graphical analysis.

It may be noted, here, that for statistical purposes we have treated as F farms those for which  $\frac{L_f}{L}$  is greater

than 0.90 and as H farms those for which  $\frac{L_h}{L}$  is greater than 0.90 where

$L_f$  represents family labour and  $L_h$  hired labour working on the family farm  
( $L_f + L_h = L$ )

We may now put together our findings with regard to the different hypotheses for the three different regions as follows:

**Punjab:** (1) Both hypotheses  $H_1$  and  $H_2$  are rejected. As a matter of fact, purely hired labour based farms put in about the same amount of human labour as purely family labour based farms, whereas output per hectare on purely hired labour based farms is higher than that on purely family labour based farms. This would imply that the purely hired labour based farms use capital and other non-labour inputs at a higher intensity than purely family

labour based farms.

(2) It is, however, seen that labour input per hectare decreases as farm size goes up both for H farms and F farms whereas output per hectare decreases as farm size goes up for F farms only but does not do so for H farms. From these we can draw the following two important conclusions:

- There are factors other than cheapness of family labour which operate in Punjab to give rise to decreasing labour intensity in larger sized farms.
- However, decreasing labour intensity in large sized farms results in decreasing value of output per hectare with farm size only on F farms; there is no such tendency operating for H farms. One interpretation of this may be that the larger H farms use higher amounts of capital and other non-labour inputs than smaller H farms.

(3) Coming now to mixed farms — i.e., those using the combination of family labour and hired labour — it is seen that the total labour input per hectare does indeed go up as proportion of family labour to hired labour goes up (thus confirming  $H_5$ ); but this does not result in the output per hectare going up at the same time, thus refuting  $H_7$ . This is because, the productivity of labour goes down as the proportion of family labour to hired labour goes up (confirming  $H_8$ ) in such a fashion as to counteract the higher intensity of application of labour with higher proportion of family labour to hired labour.

To conclude, in Punjab, the fact of the proportion of H farms going up with size and the proportion of hired labour to family labour in farms with mixed labour going up with size, results in the contrary of what the 'cheap



labour' based explanation would have; i.e., output per hectare increases instead of decreasing as farm size goes up.

*Assam:* Hypotheses  $H_1$  and  $H_2$  both fail to receive either refutation or confirmation — there being no clear pattern over the different size classes. However, when it comes to a farm using a combination of hired labour and family labour, labour intensity goes up as proportion of family labour to hired labour goes up, but output per unit of labour remains more or less unchanged. This may imply that complementary inputs are increased along with the input of labour in such a fashion as to prevent labour productivity from declining. The net result is output per hectare going up as the proportion of family labour to hired labour goes up. The case of Assam can, therefore, be treated as a case by and large supporting the cheap labour based explanation as far as mixed farms (farms of type F-H) are concerned. The explanation in terms of pure H farms and pure F farms does not, however, apply unambiguously. But it may be noticed that output per hectare decreases with farm size for F farms and the input of labour per hectare shows a similar tendency — though much less marked. The same tendencies are not particularly discernible in H farms. This, however, indicates that in the case of Assam, whether or not cheapness of family labour is a factor giving rise to the inverse relationship between output per hectare and farm size, there are certainly factors giving rise to the phenomena.

*West Bengal:* In the matter of intensity of labour input as well as productivity of land, there does not seem to be any difference between F farms and H farms, as long as the farm size is small. But, for the larger sized farms, the H farms do seem to apply labour less intensely and obtain lower per hectare output. However, in farms using a combination of hired labour and family labour, neither intensity of labour input nor output per acre vary systematically with the proportion of family labour to hired labour (see Rudra, 1973). Productivity of labour, however, does fall with the proportion of family labour to hired labour going up (see Rudra 1973). This suggests that farms utilising more of hired labour use more of non-labour inputs per acre. Hence, the net result is that, even

though proportion of family labour to hired labour goes down as farm size goes up, it is not accompanied by any decrease in output per acre. In this connection, we may further note that the labour input per hectare as well as the output per hectare decreases with farm size for H farms, though they do not do so for F farms. This once again suggests that there are factors other than cheapness of family labour which give rise to a tendency of decreasing output per hectare with farm size increasing for farms based on hired labour. There must be other compensatory factors, once again other than cheapness of family labour, which prevent this tendency from operating in the case of F farms.

We may now conclude that the 'cheap labour' based explanation may possibly be the one explanation for the alleged inverse relationship where it holds, but certainly not one that is either universally valid or which takes precedence over various explanations that have been advanced by other research workers.

#### IV

We now present our own view about the relationship of farm size and the intensities with which inputs are applied and output obtained.

(a) In most regions of India, for which data are available, small farmers seem to cultivate their lands more intensely — in the sense that they put in more of labour per hectare, more of non-labour material inputs per hectare, they seem to arrange for irrigation for greater proportion of their land, go in for a multiplicity of crops, and choose among crops those that are more remunerative. These are not universal laws but these features occur in different combinations in different parts of the country.

(b) There are possibly various reasons why small farmers behave in this fashion. The different explanations that have been put forward by different authors are not really rivals: They probably operate, once again, in different combinations in different areas. It seems to us that one ought to distinguish between forces that drive small farmers to such intensive effort and factors that permit them to indulge in such more intensive effort.

(i) Among the factors that permit small farmers to undertake more intensive effort are the cheapness of family labour (where it is true), indivisibilities of capital, superior quality

of land (where it is true), better quality of management that can be applied to a smaller farm, etc.

(ii) Among the factors that drive a small farmer to more intensive effort the most important one, of course, is his need for survival. There is a certain basic minimum of consumption that a poor peasant family has to have without which it will be simply wiped out. It is only understandable that such a poor peasant family, depending on a small piece of land, submerged in a vast population of surplus labour in the countryside, and thus not having any alternative sources of employment and income, would try to produce the maximum output on his piece of land. He would not only ignore any marginal productivity calculations insofar as family labour is concerned, he would employ hired labour whenever necessary to supplement family labour, and in doing that would pay no heed to marginal productivities. He would also try to apply non-labour and non-monetised inputs with maximum intensity, once again by using labour without any calculations. He would try to improve the quality of land by small-scale irrigation and other such means as can be procured with the help of labour. He will tend to leave fallow as little land as possible, and try to cultivate as many crops as possible and choose such crops which after meeting his minimum consumption needs would meet his minimum cash needs. In case the poor peasant's land is leased in on share basis, he would not be applying inputs that he can command less intensely guided by any consideration of the Marshallian analysis of sharecropper behaviour. His tendency to intensify his effort would be all the more so because of the fact that he has now to meet his minimum needs with only a share of the results of his effort.

(c) However, a poor peasant by his very position is at a disadvantage compared to the bigger farmer insofar as his capacity to apply capital and other monetised inputs is concerned. As such, even after all the efforts he can undertake, output per hectare on his farm may not be larger than on the farms of bigger farmers.

It is our view that the factors driving a poor peasant towards more intensive effort are more important than the factors permitting him the same. In other words, to the extent the smaller farms in many parts of India yield higher output per hectare than the larger farms, it is somewhat misleading to treat the phenomena as one of relative efficiency rather than of distress and affluence. Also, it is somewhat misleading to treat the phenomenon as one of scale; for, in our view, in many areas, the phenomenon is re-



stricted to the small farm size groups which are subject to distress conditions and not a law that holds for all values of size variable  $X$  — from zero to infinity. We, of course, do not claim any originality in emphasising this distress factor. Many authors — e.g., C H H Rao (1966),<sup>7</sup> Bhagwati and Chakravarty (1971),<sup>8</sup> Krishna Bharadwaj (1974a)<sup>9</sup> — have made similar observations.

While some of the discussions participating in the controversy regarding the inverse relationship between farm size and land productivity have treated the question as merely one of academic interest, there are others who have not failed to notice that the question is of fundamental significance from the point of view of economic policy — and hence, of politics. Involved, are questions regarding the choice between small family labour based 'peasant farms', large hired labour based 'capitalist farm', and large farms with co-operative type of organisations. In this, we are in the company of Bhagwati and Chakravarty (1971),<sup>10</sup> Krishna Bharadwaj (1974a),<sup>11</sup> among others. Policy implications would differ diametrically, depending on whether one tends to treat the inverse relationship when operating as an indication of higher 'efficiency' of smaller farms or regards the phenomena as reflecting conditions of distress of small farms. From the first point of view, would follow such a policy recommendation as say that of C H H Rao (1966), "... measures to effect the transfer of land from the big to the small and medium farms through sales and through tenancy on a commercial basis are desirable", or as say that of Dandekar: "... for India the capitalist form of wage-labour organisation will lead to inefficient aggregate output and the peasant family system implied by individual peasant proprietorship would be superior. Ideally, this argument would lead to an agrarian structure, based on peasant families owning land in the same ratio as the overall family-land ratio" (Bhagwati and Chakravarty, 1971). From the second point of view (i.e., of distress driving small farmers to endeavour in all possible ways to eke out a subsistence from their small land fragments), if it be made the basis of a policy for preserving small farms as they are, the result would be the destitution and expropriation of poor peasants and the promotion of capitalist farming on a large scale in the countryside.

For, as Paresh Chattopadhyay (1972)

writes, "... behind the facade of 'efficiency' of the family labour-based agriculture, lies the stark exploitation of the cultivator by merchant capital and usurious capital, and this is manifested in his over-work and chronic under-consumption. If such is the situation under the system of owner-cultivation, it is far worse under the system of tenancy, such as sharecropping, inasmuch as the landlord becomes a sharer, together with the merchant and the moneylender, of the produce made out of the surplus-labour of the tenant cultivator."

It is ironical that a static comparative situation between small farms and big farms, allegedly prevailing in the fifties in certain parts of the country — and even that, not at all established beyond doubt — has been the basis of plenty of friends of the rural poor opting for an agrarian policy that is ultimately destined to cause immiserisation of the rural poor. For, even if the static comparison is valid in a certain stage of development of agriculture with low technological inputs, it cannot remain so during a period when there is a mounting drive by richer farmers to go in for more and more technological agriculture in search of higher profits. As Bhagwati and Chakravarty point out, the argument in favour of small peasant farm "... rules out possible indivisibilities, relating to inputs, which may make co-operation desirable. Further, as a policy prescription, it is inadequate as it does not take into consideration the economic problems of the transition from one system to the other ... while such an agrarian structure can be demonstrated to be statistically efficient, its effect on long-run growth may be deleterious if induced savings are adversely affected and there are political limits to the governmental ability to tax (as there certainly is in India, especially with respect to the agricultural sector)" (Bhagwati and Chakravarty, 1971).

It is also ironical that, on the policy level, the alternatives seem to have reduced themselves to two — viz, small-scale peasant farming and large-scale capitalist farming. That there was a third alternative — viz, that of co-operative farming — seems to have completely disappeared from public memory. Under the peculiar conditions in which socialism has been adopted as a programme by equally peculiar political forces, the co-operative movement, which figured as one of the most important planks in the programmes of

socialists in pre-Independence years, rapidly proved to be a failure in the post-Independence years. All shades of opinion in the country seem to have accepted once for all that co-operativisation is to be decisively rejected as a means of overcoming difficulties arising from the smallness of the overwhelming majority of farms in India. Many erstwhile supporters of the co-operative movement have now turned into supporters of peasant farming, drawing consolation from the thought that large-scale farming is not after all necessary for dynamism in agriculture.

## Notes

- 1 Thus, Sen (1975) writes: "Furthermore, Observation III was concerned with output per 'net' acre and not with output per 'gross' acre, whereas Rudra (1968) looked at the latter in his testing". And Bharadwaj (1974b) writes: "Commenting on Rudra (1968), C H H Rao (1968) pointed out that the disagreement could have arisen because of the use of Rudra of yield per gross cultivated acre as the dependent variable instead of yield per net cultivated acre". Both of them fail to mention that Rudra in his paper in 1968 (b) used net cropped area, not gross cropped area.
- 2 This agrees with the conclusion of Krishna Bharadwaj (1974a) about individual crops: "that in the majority of cases there is no significant or systematic relation between the two". Our findings relating to total material input per hectare, labour input per hectare, intensity of cropping are also in agreement with the conclusions drawn by Bharadwaj in (1974a, 1974b). In this connection, her findings about cropping pattern are illuminating.
- 3 See results derived by C H H Rao (1966) and Krishna Bharadwaj (1974b) on the contribution of irrigation to higher productivity in smaller farms.
- 4 See discussion by Dipak Mazumdar (1965) and Usha Rani (1971) for consideration of the higher intensity of application of total inputs by smaller farms.
- 5 C H H Rao (1966) also makes the point of same marginal productivity curve not being applicable for the different kinds of farms under consideration. However, Rao argued for the marginal productivity curve for small farms to be higher than that for large farms. It does not seem to us that this may be taken for granted for all situations.
- 6 See Rudra (1976) and Bharadwaj (1974a) for extensive discussion of the point regarding heterogeneous character of labour.
- 7 Thus C H H Rao (1966) writes: "It is also possible that income itself is an important variable motivating the small farmers to work the



land intensively and introducing an element of indifference among big farmers, especially when such farmers are accustomed to the traditional consumption patterns and show greater preference for leisure and non-economic pursuits in the villages".

- 8 "On the other hand, the possibility that the smaller farms are in distress could lead to their being more efficient in their use of resources, especially labour and management (the alternative being ruination)." Bhagwati and Chakravarty (1971).
- 9 Thus Krishna Bharadwaj (1974a) writes: "... very small farmers may 'choose' to raise as much gross value of output as possible per acre, even at the cost of having to incur debts to provide circulating capital; they may be found operating land intensively even to a point where the additional input costs exceed the value of additional output". And also, "a small enough parcel would compel the tenant to put in a high amount of his own labour and other inputs in an effort towards providing subsistence for himself and his family after paying out the landlord's share".
- 10 "This relationship ... has an obvious bearing upon the policy issues pertaining to land ceilings and land grouping under co-operative farming and other forms of agrarian organisation ..." Bhagwati and Chakravarty (1971).
- 11 "An adequate 'explanation' is important not only for policy formulation but also for assessing the future possibilities — whether the productivity differentials are a characteristic that could persist, making the small peasant family farms a historically viable form (and possibly a relatively 'efficient' one) or whether their relative 'advantage' rests on a specific conjuncture subject to change or whether it is more of a static reflection of the economically vulnerable position of the small operators." Krishna Bharadwaj (1974a).

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### Development Aid

DEVELOPMENT ASSISTANCE COMMITTEE (DAC) Members raised their net disbursements of official development assistance (ODA) in 1975 to \$ 13.6 billion, from \$ 11.3 billion in 1974, an increase of 20 per cent. As a share of DAC Members' GNP, ODA rose to 0.36 per cent, from 0.33 per cent in 1974. This confirms the reversal of the earlier downward trend, but still leaves the total far short of the target of 0.7 per cent of GNP which has been accepted by thirteen DAC members.

All seventeen DAC countries, except Italy, increased their outflow of ODA in dollars, and thirteen raised it as a share of their GNP. Particularly rapid growth was recorded by Australia, Belgium, Canada, Netherlands, New Zealand, Norway, Sweden and Switzerland; all these countries' ODA/GNP ratio rose by at least ten per cent above the 1974 level. Two countries, Netherlands for the first time, and Sweden for the second time, achieved an ODA/GNP ratio above the target of 0.7 per cent, setting new records in each case (Sweden: 0.82 per cent, Netherlands: 0.75 per cent).

As prices rose by about 10 per cent in 1975, the growth of ODA in real terms, i.e. measured in constant prices and exchange rates, was a little less than 10 per cent.

Preliminary figures indicate a certain shift in the purposes for which ODA

resources were provided in 1975. Food aid, supplied directly or through multilateral channels, rose from 13 to 16 per cent of the total, and there was a decline in the share of technical co-operation expenditures from 25 to 23 per cent. The most noteworthy feature, however, was the considerable increase in project, rather than non-project, assistance, as earlier commitments were brought to the disbursement stage. An increase of some 5 per cent, to 23 per cent, in the share of capital project assistance was almost identically offset by a fall in the share of non-project financing from 21 per cent in 1974 to 16 per cent in 1975.

The terms of ODA softened slightly in 1975. According to the preliminary data available, the share of grants in total commitments rose slightly from 65.4 per cent in 1974 to 66.2 per cent in 1975, while loan terms remained on average at their 1974 level.

The total flow of \$ 47.8 billion was an increase of one third on 1974 in dollars, and of some 20 per cent in real terms. It brought the total receipts of developing countries to \$ 23 per person — equivalent to 5 per cent of their GNP and about one quarter of their investment. A decade ago (average 1964/1966) the corresponding figure was \$ 6.50 per person. On this basis, the real value of the annual transfer of resources has risen by some 60 per cent in the past ten years.



# Factor Endowments, Technology and Farm Employment

## Comparison of East Uttar Pradesh with West Uttar Pradesh and Punjab

C H Hanumantha Rao

*Agricultural research in India has been directed so far to varietal improvements which are essentially capital-using and raise yield per cropped acre.*

*This is explained partly by the fact that our scientific infrastructure is very much conditioned by the factor-use bias of the developed countries and partly by the influence exerted by the affluent segments within our farm sector, for whom substitution of capital for labour has become increasingly profitable.*

*Varietal improvements which may not raise yield per cropped acre but reduce the crop duration significantly, can enable a significant increase in output and employment by facilitating multiple cropping.*

*There is, therefore, a need to evolve land-augmenting technologies with labour-use bias so as to suit the labour-abundant and capital scarce regions during the initial stages of their development.*

### I

#### Summary

IT is argued in this paper that HYV technology, in as much as it is more capital-using than labour-using, is out of line with the factor endowments of the eastern zone in India where labour is abundant and capital is scarce. The widespread use of HYV technology in west Uttar Pradesh and Punjab is understandable on a similar reasoning because even though land constraint is not as severe as in the eastern zone, labour is relatively scarce and investable capacity is greater.

Increase in irrigation and cropping intensity is likely to absorb more labour than HYV technology. Further, a given increase in irrigation is likely to create much greater employment in areas like east UP than in west UP or Punjab because employment per irrigated acre whether with local varieties or HYV, is much greater in east UP and increase in cropping intensity as a result of irrigation is also likely to be greater in this region because of the abundance of labour.

Research has been directed so far to varietal improvements which are essentially capital-using and raise yield per cropped acre. This is explained partly by the fact that our scientific infrastructure is very much conditioned by the factor-use bias of the developed countries and partly by the influence exerted by the affluent segments within our farm sector, for whom substitution of capital for labour has become increasingly profitable. Varietal improvements which may not raise yield per cropped acre but reduce the crop duration significantly, can enable a

significant increase in output and employment by facilitating multiple cropping. There is, therefore, a need to evolve land-augmenting technologies with labour-use bias so as to suit the labour-abundant and capital scarce regions during the initial stages of their development.

### II

#### Land-Saving Techniques: Their Labour-Saving and Labour-Using Biases

Land-augmenting or land-saving technologies may broadly be classified into two types: those which raise the yield of any particular crop per unit of land and those which increase total output per unit of land from all the crops grown over a rotational period, say, a year through the increase in cropping intensity. Owing to the complementarity between cropped area and labour, some of the land-saving techniques of the former type such as HYV are labour-saving as well. Where crop yields are raised substantially through the intensive application of fertilisers, there may be some increase in the use of labour for operations such as interculturing and harvesting but the amount of labour used per unit of capital or per unit of output is reduced significantly. Increase in output through the increase in cropping intensity, on the other hand, raises employment of labour almost proportionately to the increase in capital or output. The former type of techniques suit capital-abundant and labour-scarce economies even if they are not land-scarce and the latter are better suited to the capital-scarce and labour-abundant regions

especially in their initial stages of development when the bulk of the growing labour force has to be absorbed within the agricultural sector.

Short-duration High-Yielding Varieties do contribute to an increase in cropping intensity but their main impact is to increase crop yields. Besides, their impact on cropping intensity would be confined to those sectors which have a better command on resources for investing in fertilisers, pesticides, etc. These are generally the wage-based large farms or developed regions where wage rates are high so that increase in cropping intensity in such sectors is associated with mechanisation of farm operations. Thus the net increase in farm employment in such sectors would be negligible. Even where there is a significant increase in employment owing to the very high rate of growth of output, it is clear that employment per unit of capital or output would be smaller, whereas a similar increase in output among the labour-abundant regions and small farms would have a much higher employment potential. But, in so far as the latter sectors cannot adopt HYV extensively, their impact on cropping intensity would be correspondingly smaller.

The induced innovation hypothesis developed by Yujiro Hayami and Vernon W Ruttan<sup>1</sup> on the basis of the experience of agricultural growth in several countries suggests that the relative abundance of capital as embodied in cheap fertilisers as well as scarcity of labour have been important factors accounting for the discovery and widespread use of HYVs in an extremely land-scarce economy like Japan as well as in a land-abundant



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economy like the United States. In response to the steep decline in the relative prices of fertilisers, research was directed to the discovery of seeds which are highly fertiliser-consuming so that at equilibrium, the average product for fertilisers is significantly lower than for old varieties. Unlike in many of the South and Southeast Asian countries at present, land per worker was rising in the United States as well as Japan throughout the period of breakthrough in crop yields as is evident from the data given in Table 1, by Hayami and Ruttan.<sup>2</sup>

It would appear that the existing scientific infrastructure responsible for the development of HYVs was evolved in the context of rising labour cost and the availability of cheap fertilisers apart from the scarcity of land as in Japan. Absorption of more labour on the farm was not a major requirement confronting the scientists and policy-makers in these countries. The accent on the increase in crop yields rather than in cropping intensity suited the factor endowments of economies like the United States. The rise in crop yields would appear to have been the major component and the increase in cropping intensity, the minor component of land-augmenting technological change in the capital-abundant and labour-scarce economies.

The experience of several countries discussed by Hayami and Ruttan indicates a rational sequence in the adoption of innovations over different stages of agricultural development. For instance, in Japan, Taiwan and Korea, increase in irrigation and in cropping intensity, which are relatively more labour-intensive, was more important in the initial stages of development when labour was not costly. Already at the beginning of the Meiji Restoration, almost 100 per cent of the paddy fields in Japan were irrigated. As far back as 1935, the percentage of area irrigated was 78 per cent in Taiwan and 69 per cent in Korea. The cropping intensities were 165 and 126, respectively.<sup>3</sup> In the later stages, however, increase in crop yields through the HYV and the intensive application of fertilisers became a major source. In land-scarce economies, this component becomes important after the potential for irrigation and cropping intensity is already exhausted, when labour scarcities emerge and constraints on capital are eased as a result of a high overall economic growth.

In countries like India, there is some dichotomy between the factor

TABLE 1: OUTPUT/HECTARE AND LAND/WORKER RATIOS IN US AND JAPAN  
(Index: 1880 = 100)

	1900	1920	1940	1960
United States				
Output/hectare	91	72	94	143
Land/worker	137	195	230	476
Japan				
Output/hectare	135	184	205	280
Land/worker	112	130	159	162

TABLE 2: CROPPING INTENSITY AND EMPLOYMENT IN JAUNPUR  
(East UP) Farms, 1969-70

	Traditional Farms (1)	Modern Farms (2)	Percentage Change (3)
(1) Net Irrigated Area as Percent of Total Cultivated Area:			
Tubewells	5.60	99.40	—
Masonry wells	63.40	0.60	—
(2) Cropping Intensity	136.50	187.60	37.44
(3) Human labour days per acre of net sown area	62.2	88.9	42.93
(4) Human labour day per acre of gross sown area	45.5	47.6	4.62

Source: Shrinath Singh, "Modernisation of Agriculture", Heritage Publishers, New Delhi, pp 69, 82.

TABLE 3: CROPPING INTENSITY AND EMPLOYMENT IN FEROZEPUR (PUNJAB)

	1954-57 (1)	1967-70 (2)	Farms Percentage Change (3)
(1) Net irrigated area as percentage of total cultivated area.	68.92	87.03	—
(2) Intensity of cropping.	120.90	128.31	6.1
(3) Human labour days per hectare of cultivated area	58.55	80.56	37.5
(4) Human labour days per hectare of cropped area	48.43	60.01	23.9

Source: A S Kahlon and S S Miglani, "Studies in the Economics of Farm Management, Ferozepur District (Punjab)", Combined Report, 1967-68 to 1969-70.

endowments of the developed pockets and large farmers on the one hand and the rest of the farm economy on the other. The former are usually articulate and exert greater influence on policy making and research. This together with the fact that the scientific infrastructure borrowed by the developing economies is conditioned by the factor-use biases of the developed economies, introduces a lag, in the rational adjustment of the processes of scientific research and public policies to the factor endowments of the developing country. It is necessary to focus on these lags and on the possible mechanism for speeding up adjustment. To this extent the induced innovation hypothesis by Hayami and Ruttan may need elaboration in the light of the recent experience.

In India, HYVs have been adopted on a large scale in regions like Punjab and west UP where land-worker ratios and wages are high and which have a better resource position. Irrigation and cropping intensities were already at a very high level in these regions before the introduction of HYVs, although these were expanded further with the use of HYVs. In the extremely land-scarce and labour-surplus regions like east UP, however, where the need for land-augmenting techniques is greater for increasing output by using the most abundant factor, viz. labour, the adoption of HYVs has been slow due mainly to the capital constraint. Despite the extremely favourable underground water table, the growth of private investment in tubewells has not been impressive. This



TABLE 4: EMPLOYMENT (LABOUR DAYS) PER HECTARE

	Irrigated Wheat			Irrigated Rice		
	Local (1)	Modern (2)	Per Cent Change (3)	Local (4)	Modern (5)	Per Cent Change (6)
Ferozepur, 1967-70 (Punjab)	52 (46.7)	68 (44.7)	30.8	79 (36.5)	92 (44.6)	16.5
Large farm (24 hectares and above)	47.31	58.16	22.90	72.64	111.37	53.30
Small farm (below 6 hectares)	59.61	80.00	34.20	84.73	131.41	55.1
Per cent difference	26.0	37.6		16.6	18.0	
Muzaffarnagar, 1966-69 (West UP)	59 (56.6)	63 (52.9)	6.8	70 (40.0)	—	—
Large farm (10.66 hectares and above)	46.7	55.93	19.8	71	—	—
Small farm (below 2.87 hectares)	85.1	105.91	24.5	71	—	—
Per cent difference	82.2	89.4		—	—	
Dhanpur-Vijaypur (Tarai UP, 1971-72)	—	67	—	97	122	25.8
Tarha (East UP, 1971-72)	92	106	15.2	130	146	12.3
Barain (East UP, 1971-72)	117	111	-5.1	117	148	26.5

Note: Figures in brackets give the percentage of family labour input to total labour input.

Sources: (i) "Studies in the Economics of Farm Management", Ferozepur District (Punjab), 1967-68 to 1969-70; and Muzaffarnagar District (UP), 1966-67 to 1968-69.

(ii) International Rice Research Institute, "Changes in Rice Farming in Selected Areas of Asia", 1975, pp 93-116.

experience shows that for the poor and labour-surplus regions, profitability of investment is not a sufficient condition for the adoption of new techniques. Public investments to ease the resource constraint may have to be directed to improving infrastructure like irrigation and drainage which in themselves have a potential for increasing output and employment apart from providing the necessary basis for the widespread use of HYVs.

Increase in crop yields seems to have been the main factor accounting for the rise in employment in Punjab after the mid-fifties whereas the shift from traditional to progressive cultivation in east UP appears to proceed mainly through the increase in irriga-

tion and cropping intensity. An in-depth study of traditional and modern farms in Jaunpur district of East UP by Shrinath Singh (Table 2) shows that the process of modernisation in this labour-abundant area is associated with a steep increase in assured irrigation and cropping intensity. Cropping intensity increased by 37.4 per cent, indicating that employment would have increased by about the same rate if the cropping pattern remained the same and there was no increase in yield per acre. Since the actual increase in employment was about 43 per cent, it appears that nearly 87 per cent of the increase in employment can be attributed to the increase in cropping intensity. In Ferozepur (Punjab) farms, on the

other hand, employment would have increased by about 6 per cent on account of the increase in cropping intensity as against the total increase in employment of about 37.5 per cent between the mid-fifties and the late sixties (Table 3). Thus increase in cropping intensity accounted for only about 16.3 per cent of the increase in employment.

### III

#### Variations in Employment Per Acre

##### REGIONAL VARIATIONS

The East-West differences in farm employment per hectare in India reflect

TABLE 5: EMPLOYMENT OF LABOUR PER UNIT OF CAPITAL AND OUTPUT

	Per Hectare				Capital/ Labour (5)	Labour/ Output (6)	Capital/ Output (7)	Cash Outlay/ Labour (8)	Cash Outlay/ Output (9)
	Yield (quintals) (1)	Capital Inputs (Rs) (2)	Cash Outlay (Rs) (3)	Labour Input (days) (4)					
Deoria (East UP), 1966-69									
Wheat (unirrigated)	13.8	532	56.6 (10.6)	57.6	9.2	4.17	38.6	0.98	4.1
Wheat (irrigated)	17.5	712	73.0 (10.3)	100.0	7.1	5.71	40.7	0.73	4.2
Per cent difference	26.8	33.8		73.6					
Ferozepur (Punjab) 1967-70									
Irrigated wheat									
Local	16.0	485	150 (30.9)	52.0	9.33	3.25	30.3	2.88	9.4
HVY	23.8	717	311 (43.4)	68.0	10.54	2.86	30.1	4.57	13.1
Per cent difference	48.8	47.8		30.8					

Note: The figures in brackets give the percentage of cash outlay to capital input.

Sources: Directorate of Economics and Statistics, Ministry of Agriculture, "Studies in the Economics of Farm Management", Deoria (UP), 1966-67 to 1968-69; and Ferozepur (Punjab), 1967-68 to 1969-70.



the respective factor-endowment and factor-price situations. Table 4 shows that average employment per hectare for local wheat ranged between 50 and 60 days in Ferozepur (Punjab) and Muzaffarnagar (west UP) whereas it was well above 90 days in the east UP villages. For modern varieties of wheat, the average level of employment varied between 60 and 70 days in the relatively labour-scarce regions (including Tarai UP) as against more than 100 days in the labour-abundant east UP villages. Similarly, in the case of a labour-intensive crop like rice (local as well as modern), the employment per hectare in the western zone (70 to 90 days) was significantly lower than in east UP (100 to 150 days). It would appear from these data that employment per hectare is at least 50 per cent higher in east UP when compared to Punjab or west UP. Since rice is a labour-intensive crop absorbing about one-third more labour than wheat, its predominance in east UP is quite in keeping with the abundance of labour in this region.

Despite the extreme scarcity of capital in east UP, it appears from the data in Table 5 that capital cost (excluding rental value of land, but including depreciation on farm animals, machinery and irrigation structures) per hectare for irrigated local wheat is nearly the same as for HYV wheat in Ferozepur (Punjab). Consequently, the ratios of capital input to labour input are not very much lower in east UP. In fact, the ratios of capital input to output are higher in east UP than in Ferozepur (Punjab). This appears contrary to what one would expect on the basis of the prevailing factor endowments. However, this is explained by the fact that much of the capital input in this region represents non-monetary capital formation such as construction of irrigation works (masonry wells) and rearing and upkeep of farm animals by using surplus family labour. For instance, according to the Farm Management Studies in the late sixties private wells dug and used through labour-intensive methods accounted for as much as 86 per cent of the total irrigated area in Deoria (east UP) as against only about 7 per cent in Muzaffarnagar (west UP). Also, Deoria farmers employed 32 bullock (pair) days per hectare as against 26 in Muzaffarnagar.<sup>4</sup> It would, therefore, be more meaningful to examine the volume of employment generated in relation to cash outlays (excluding the wages for hired labour). Cash outlays constituted only about 10 per cent of total capital input in east UP as against

TABLE 6: OPERATION-WISE (PERCENTAGE) DISTRIBUTION OF LABOUR DAYS EMPLOYED

	Irrigated Wheat		Irrigated Rice	
	Local (1)	Modern (2)	Local (3)	Modern (4)
<b>Ferozepur (Punjab, 1967-70)</b>				
(1) Land preparation	27.28	19.15	15.71	14.53
(2) Sowing/transplantation	6.00	4.36	20.63	16.99
(3) Interculture	5.93	10.58	9.14	11.35
(4) Irrigation	13.51	18.83	21.17	21.28
(5) Harvesting, threshing and winnowing	44.18	43.53	32.90	35.35
(6) Others	3.10	3.55	0.45	0.50
Co-efficient of variation	86.9	81.0	60.3	63.1
<b>Muzaffarnagar (West UP, 1966-69)</b>				
(1) Land preparation	27.08	—	12.98	—
(2) Sowing/transplantation	7.68	—	15.87	—
(3) Interculture	7.98	—	24.10	—
(4) Irrigation	9.81	—	6.64	—
(5) Harvesting, threshing and winnowing	40.19	—	38.68	—
(6) Others	7.26	—	1.73	—
Co-efficient of variation	75.6	—	72.5	—
<b>Dhanpur, Vijaypur (Tarai, UP, 1971-72)</b>				
(1) Land preparation	—	14.93	9.28	7.37
(2) Sowing/transplantation	—	2.99	42.27	27.05
(3) Interculture	—	29.85	21.64	29.51
(4) Harvesting, threshing and winnowing	—	52.23	26.81	36.07
Co-efficient of variation	—	73.5	47.3	42.8
<b>Tarna (East UP, 1971-72)</b>				
(1) Land preparation	28.26	26.41	16.93	16.44
(2) Sowing/transplantation	9.78	7.55	30.77	26.02
(3) Interculture	21.74	26.42	16.92	21.92
(4) Harvesting, threshing and winnowing	40.22	39.62	35.38	35.62
Co-efficient of variation	44.0	45.7	32.9	28.1
<b>Barain (East UP, 1971-72)</b>				
(1) Land preparation	25.64	27.02	17.95	17.56
(2) Sowing/transplantation	7.69	8.11	32.48	25.00
(3) Interculture	29.91	29.73	17.09	20.95
(4) Harvesting, threshing and winnowing	36.76	35.14	32.48	36.49
Co-efficient of variation	43.0	40.7	27.7	28.4

**Sources:** (i) Directorate of Economics and Statistics, Ministry of Agriculture, "Studies in the Economics of Farm Management", Ferozepur (Punjab), 1967-68 to 1969-70; and Muzaffarnagar (UP), 1966-67 to 1968-69.  
(ii) International Rice Research Institute, "Changes in Rice Farming in Selected Areas of Asia", 1975, pp 93-116.

31 to 43 per cent in Ferozepur (Punjab), so that cash outlays per unit of labour and output turn out to be much lower in east UP.

#### TECHNIQUE-WISE DIFFERENCES

Modern varieties do absorb more labour per hectare than local varieties but not more than 25 to 30 per cent, whereas irrigated wheat absorbs over 70 per cent more labour than unirrigated wheat (Table 5). In the case of a shift from local to HYV, the rise in capital input, especially cash outlays, is much greater than labour input. Thus whereas a shift from unirrigated to irrigated farming in a labour-abundant region is associated with a decline in the ratios of capital input (or cash outlay) to labour, a shift from local

varieties to HYV in the developed irrigated areas raises ratios significantly.

Labour use per hectare is significantly higher among the small farms when compared to large farms (Tables 4 and 7). With the shift from local to modern varieties in the western zone, the increase in labour input per hectare is greater among the small farms than among large farms (Table 4). This suggests that there is some scope in these regions for substitution between capital and labour for HYV technology so that its use among the small farms is likely to generate more employment. However, the data do not indicate a greater rise in employment with the use of HYV in East UP when compared to Punjab or West UP (Table 4). This may be explained by



TABLE 7 : EMPLOYMENT (LABOUR DAYS) PER HECTARE AND ITS OPERATION-WISE (PERCENTAGE) DISTRIBUTION IN DEORIA (EAST UP) 1966-69

	Early Paddy Unirrigated (1)	Late Paddy Unirrigated (2)	Wheat Unirrigated (3)	Wheat Irrigated (4)
Per cent distribution				
Preparatory tillage	21.16	20.97	21.20	21.35
Sowing	11.38	25.10	10.69	8.86
Manuring	2.55	1.57	7.34	4.25
Irrigation	—	—	—	24.84
Interculture	25.94	27.04	2.33	1.01
Harvesting and threshing	38.97	25.32	58.44	39.69
Total labour days	85.79 (54.1)	65.03 (42.2)	57.63 (70.7)	100.12 (53.8)
Co-efficient of variation	62.3	47.1	101.0	80.4
Large farm (above 3.08 hectares)	77.12	61.65	45.33	96.45
Small farm (below 1.04 hectares)	116.29	83.00	78.30	149.37
Per cent difference	50.79	34.63	72.73	54.86

Note : Figures in brackets give the percentage of family labour input to total labour input.

Source : Directorate of Economics and Statistics, Ministry of Agriculture, "Studies in the Economics of Farm Management in Deoria, Uttar Pradesh, 1966-69".

TABLE 8 : GROWTH OF CROP OUTPUT AND INPUTS IN UTTAR PRADESH

	Period I 1950-51—1964-65 (1)	Period II 1950-51—1970-71 (2)
Annual Growth Rate of Output		
Rice		
Group of 13 districts	7.66	2.92
Rest of the state	8.15	5.09
Wheat		
Group of 13 districts	5.07	6.04
Rest of the state	2.00	7.23
Total foodgrains		
Group of 13 districts	2.53	1.64
Rest of the state	1.33	2.66
Inputs	1964-65	1970-71
Percentage of irrigated area to gross cropped area		
Group of 13 districts	24.0	27.4
Rest of the state	29.4	39.8
Fertiliser per hectare (kgs)		
Group of 13 districts	3.6	13.4
Rest of the state	5.0	22.6

Source : B N Tyagi, "A Study of the Impact of Green Revolution on the Regional Development of Agriculture in Uttar Pradesh", *Indian Journal of Agricultural Economics*, October-December, 1974.

the fact that labour input per hectare is quite high for local varieties in this region so that further scope for substitution between capital and labour could be limited.

#### OPERATION-WISE DIFFERENCES

The distribution of labour among different operations does not seem to differ much between local and modern varieties (Table 6). However, the variability of labour input between different operations as indicated by the co-efficient of variation is much greater in the case of wheat when compared to rice

in the western as well as eastern zones (Tables 6 and 7). Besides, the distribution of labour input for wheat is distinctly biased towards peak-season high-wage operations such as harvesting, threshing and winnowing, whereas in the case of rice operations like inter-culturing where low-wage female labour is extensively used account for greater labour input. The greater incentive for mechanisation in the case of wheat may, therefore, be explained, among other things, by the structure of labour-use and wage cost.

It is interesting to note further that

for any particular crop, the inter-season variability in employment is very much lower in the eastern UP when compared to Punjab or West UP. This suggests that the availability of cheap-labour may induce farmers to use more labour for the lean season or non-peak operations.

Although, as can be expected, the proportion of family labour input to total labour input is comparatively higher in the eastern zone for both the crops, the proportion of family labour is significantly greater for wheat than for rice in the eastern as well as western zones (Tables 4 and 7). This is understandable because in the case of a labour-intensive crop, family labour has to be supplemented in a significant measure by the hired labour for short-duration operations.

#### IV

#### Impact of 'Green Revolution' on the Regional Development of Agriculture

B N Tyagi's study<sup>5</sup> indicates the limited impact of modern varieties on the growth of foodgrain output in east UP. Figures in Table 8, borrowed from this study, show that among the group of 13 districts comprising Jhansi Division, three districts of Varanasi, four of Faizabad and two districts of Allahabad Divisions, the output of rice which was growing at a high rate of 7.66 per cent per annum during the period 1950-51 to 1964-65 decelerated to 2.9 per cent annum during the period 1950-51 to 1970-71, which includes the 'green revolution' years. The growth of rice output in the rest of the state decelerated during this period, though not as sharply as in 13 districts. The growth rate of wheat, on the other hand, showed some increase in the group of 13 districts and accelerated significantly in the rest of the state between these two periods. However, the growth of foodgrains as a whole decelerated between these two periods in the group of 13 districts owing to the deceleration in rice output, while in the rest of the state there is acceleration in the growth of foodgrains on account of the 'wheat revolution', concentrated mainly in the west UP. It is important to note that the growth of rice as well as wheat was quite high in the group of 13 districts in the first period and the growth of foodgrains as a whole in his period was higher than in the rest of the state.

These data show, in the first place, that the farmers in these 13 districts



are quite dynamic as they did achieve, in the beginning, rates of growth much higher than the rest of the farmers in the state. Secondly, they did respond positively to modern varieties of wheat although, as a result of this, they could push up the growth rate of wheat only marginally. Thirdly, and this follows from the above two conclusions, the slowing down of growth in the later period in these districts should be explainable in terms of the factors beyond the control of the individual farmers.

Tyagi shows that the effect of drought in 1965-66 and 1966-67 was very much more severe in the group of 13 districts than in the rest of the state, because the proportion of area irrigated was lower in this region than in the rest of the state. The percentage of cultivated area irrigated rose from 24 per cent to 27.4 per cent in the group of 13 districts between 1964-65 and 1970-71 whereas it rose from 29.4 per cent to 39.8 per cent in the rest of the state (Table 8). Similarly, the disparities in the consumption of fertilisers per hectare increased during this period.

All this evidence lends plausibility to the hypothesis that the development of irrigation is crucial to agricultural growth in this region and that investment in tube-wells for tapping underground water, which is plentiful in this region, may be beyond the means of the individual farmers. This hypothesis gains strength from the evidence available from certain village surveys conducted in this region. A socio-economic survey of village Parsauni Kalan (Deoria district)<sup>6</sup> conducted by the Agro-Economic Research Centre, University of Allahabad, at two points of time i.e., 1964-65 and 1970-71 provides interesting clues to the factors underlying the growth of output in this region. Between these two years, the proportion of cultivated area irrigated increased steeply from 6.7 per cent to 36.6 per cent. Nearly three-fourths of this increase in irrigation was accounted for by government canals. Cropping intensity increased from 106.2 to 125.6. Despite this increase in irrigation and the introduction of modern varieties, the proportion of cropped area allocated to wheat increased only marginally from 26 per cent in 1964-65 to 27 per cent in 1970-71, although nearly two-thirds of wheat area in 1970-71 was under HYVs. The percentage of cropped area under paddy, on the other hand, increased steeply from 12 per cent to 24 per cent over this period, although its

yield per acre went up by only about 15 per cent as against the increase of about 75 per cent in the case of wheat.

Although the main source of increase in income was rice, the consumption pattern changed in favour of wheat which is regarded as a superior cereal. The proportion of wheat in the consumption of cereals increased from 40 per cent to 52 per cent whereas that of rice increased from 40 per cent to 41 per cent. The rationality underlying the behaviour of the farmer as a producer and the consumer has produced apparently divergent results. As a rational producer he has shifted to the cultivation of rice which is labour-intensive as well as water-intensive. As a rational consumer, he has shifted to wheat by selling more of rice.

R P Singh in his study of Raghunathpur village (Azamgarh district of east UP) in 1972-73, where 66 per cent of cultivated area was irrigated, observes "it is surprising to note that despite the introduction of HYV Programme and more availability of improved wheat varieties, the farmers were growing more barley than wheat during rabi season. This was mainly due to lack of chemical fertilisers needed in more quantity for growing high-yielding varieties of crops. Most of the farmers had poor economic base and they were unable to meet the needs for costly improved seeds and fertilisers which vitally affected their cropping pattern".<sup>7</sup>

It would appear from the above studies that if public investment in irrigation was stepped up in east UP, the output of rice would have grown

at a faster rate than wheat despite the introduction of HYV, resulting in a significant increase in overall output and employment. This has an important implication for the country as a whole. An increase in public irrigation may step up significantly the rate of growth of rice — the most important cereal in India — and with it the volume of farm employment.

### Notes

[This paper was prepared for the Seminar on 'Technology and Factor Markets' convened by the Agricultural Development Council at Singapore on August 9, 10, 1976. The issues raised in this paper were discussed earlier at the staff seminars at the Institute of Social and Economic Change, Bangalore, and the Institute of Economic Growth, Delhi.]

- 1 Yujiro Hayami and Vernon W. Ruttan, "Agricultural Development: An International Perspective", Johns Hopkins, 1971.
- 2 *Ibid*, p 114.
- 3 *Ibid*, pp 200, 208.
- 4 Directorate of Economics and Statistics, Ministry of Agriculture, "Studies in the Economics of Farm Management", Deoria and Muzaffarnagar, 1966-69.
- 5 B N Tyagi, 'A Study of the Impact of Green Revolution on the Regional Development of Agriculture in Uttar Pradesh', *Indian Journal of Agricultural Economics*, October-December, 1974.
- 6 Radhey Shyam, "Parsauni Kalan: A Socio-Economic Resurvey of a Village in Deoria District", Agro-Economic Research Centre, University of Allahabad, 1974 (mimeographed).
- 7 R P Singh, "Socio-Economic Survey of a Village in East UP" Agro-Economic Research Centre, University of Allahabad, 1974 (mimeographed).

### US Foreign Investment

US direct investment overseas rose by 12 per cent in 1975 to a total of \$ 133.2 billion. This follows an increase of 15 per cent in 1974. Net capital outflows to foreign affiliates fell by 18 per cent to \$ 6.3 billion, however, reflecting the recession which reduced both the affiliates' need for funds and the US parents' ability or willingness to supply them. Last year reinvested earnings grew by 5 per cent to \$ 8.2 billion. There was a rise in reinvested earnings of oil companies — due partly to postponements of dividend payments — while there was a decline in those of manufacturing affiliates. Balance of payments income from overseas direct investment totalled \$ 9.5 billion in 1975, a fall of 47 per cent over the year. Total US invest-

ment in developed countries went up to \$ 91.4 billion in 1975 from \$ 83.03 billion in 1974. Direct investment in Canada rose to \$ 31.16 billion from \$ 28.4 billion and investment in Europe to \$ 49.62 billion from \$ 44.78 billion.

Foreign direct investment in the US rose to \$ 26.74 billion in 1975 from \$ 22.42 billion in 1974. Europe continued to be the largest investor, with direct investment totalling \$ 16.53 billion at the end of 1975, against \$ 14.63 billion at the end of 1974. British investment totalled \$ 6.67 million, compared with \$ 6.19 billion while investment by the Netherlands rose to \$ 3.65 billion from \$ 2.84 billion. Investment by the Federal Republic of Germany increased to \$ 1.29 billion from \$ 1.14 billion.



# Food

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The Food Corporation of India serves the nation in the vital areas of food procurement, storage and distribution. It provides the link between the producer and the consumer of foodgrains. It procures grain directly from the producer, organises effective storage accommodation at strategic consumption centres and handles the swift and massive distribution of foodgrains throughout the country. In terms of turnover the Corporation heads the list of Indian companies, both in the private and public sectors, recording a peak purchase sales turnover of Rs.4,300 crores in 1975-76. The projection for the current year is placed at Rs.4,480 crores.

### Procurement

The Corporation procures wheat, rice and coarse grains in collaboration with the State Governments and other authorised agencies. The producer is thus assured of a remunerative price fixed by the Government, and is not adversely affected by fluctuation in the foodgrain market.

### 1,200,000 kms. of road and rail track

FCI's offices and storage centres organise the swift movement of foodgrain over 1,200,000 kms. of road and rail track. Every month over one million tonnes of foodgrain is moved throughout the country through an efficient transport network of land vehicles and coastal vessels.

### 17 million tonnes

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The recent allocation made for the FCI storage facilities touches Rs.17 crores and a projection of Rs. 40 crores has been made for the next two financial years. The Corporation provides storage accommodation for 17 million tonnes of foodgrain in modern and scientific warehouses, located at convenient and strategic production and consumption centres. To meet the challenge of plenty in the wake of two consecutive bumper crops, the Corporation launched a crash programme to augment its storage capacity at a very short notice. Besides constructing more conventional godowns, silo complexes, and CAP (cover and plinth) storage, the FCI has tapped new and unconventional sources by utilising 15 abandoned air strips, palaces of former maharajas, sugar mills and jute mills.

#### Price stabilisation

FCI's procurement and distribution help in greater stabilisation of prices. It makes foodgrains available to the consumer throughout the country at a fair price fixed by the Government all through the year.

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The Food Corporation of India reaches the remotest corners of the country through its vast network of offices and storage centres. Its market operations give great encouragement to co-operatives all over the country. And every year the FCI makes an active contribution to the economy of the country—generating employment for the masses in its field operations, transport services, storage ancillaries and building activity and hence serves the rural population with ready money to carry out their cash purchases.

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## UNITED KINGDOM

**Bloody Carnival**

Farrukh Dhondy

BRITAIN has its own Soweto, and fears it. On the bank holiday which marks the end of August a full blown urban riot took place on the streets of Notting Hill, London. 325 policemen were sent to hospital with injuries, shops were looted, police vehicles were stoned. The Metropolitan Police faced their first major defeat at the hands of young British West Indians. It happened at the end of Carnival, the only black festival of national significance to enliven the ghetto annually.

Now Carnival is over, and it leaves behind it a trail of broken bottles, beer cans, sticks and stones, the weapons of the urban rebel — a trail which leads inescapably to the debris of a policy of race relations which successive governments of Britain have endorsed and extended. The riot brought in its wake the usual comment and heart-searching. The television cameras, on hand to record the gaiety of Carnival, transmitted to millions of viewers what might have been film clips from South Africa or from Harlem or Watts. There was the unforgettable sight of hundreds of policemen in full retreat, scrambling for cover, re-forming their ranks behind dust-bin lids used as shields; the shot of a police car reversing at sixty miles an hour away from the mayhem that met its advance; portents enough to trigger heart-searching.

Senior politicians, including Peter Walker and William Whitelaw of the Tory Party, have called for a full enquiry into Notting Hill. Influential editors have gone further and demanded a Ministry of Inner Cities to deal with Britain's blacks, a Ministry named neutrally enough to avoid the international stigma of setting up a department of Bantu Affairs. Behind the comment was a prognostication. Notting Hill was not the first affair. The police report that in forty cases in the last year, there has been widespread resistance from young West Indians to the presence and action of police. Notting Hill was at least the fifth riot nurtured and delivered by this least demoralised, fiercely independent section of Britain's working class.

About the riot itself, there is the official version and there is the truth. To the government each is equally worrying. The official version says that amongst the 200,000 people that

gathered on the thoroughfares of Notting Hill, following steel bands and dancing in the streets, there were about 800 youngsters who had organised themselves into criminal gangs for pick-pocketing and looting the revelers. The police, they say, were on hand to prevent these gangs from operating, and when they went into the crowds to make arrests, they were stopped by the crowd who then proceeded to riot.

The truth is not merely a matter of fact, it is a version of history: Carnival has been painstakingly built over the last ten years in this country by the West Indians. They brought its traditions from the Eastern Caribbean and allowed them to mutate in British conditions. The centre of Carnival is the rivalry between steel-bands. In Trinidad each band has around it a neighbourhood and gang solidarity. Each year the neighbourhood prepares its costumes, much as the Muslim communities of India spend months building their 'tajya' or 'taboot' for Moharram. Born in the productive universe of slavery, Carnival is the arch satire of it. In the satire is the symbol of freedom; in the 'bachannal' of dance and drink and thronging is the momentary reality of it. Carnival came to Britain as all these things, and became more besides as the West Indian community donned new costumes.

To Carnival last year came the new breed, the young British West Indians, who would thank steel-bandsmen for providing an occasion, but not for their music or their form of celebration. They brought with them, as an addition rather than a replacement, the electronic sounds of Reggae. Much more important, they brought with their sounds their tradition of tireless antagonism to the police.

For, it was the police who turned the Carnival into a conflict. Six months before the festival was to be mounted, the police, a local newspaper, a few white citizens and a few elected municipal councillors, banded together to try and get Carnival banned. They wrote to the Home Secretary and organised a campaign on behalf of 'peace and quiet' on the streets. For the Indian reader, the earlier analogy makes things plain: imagine a police force, supported by a couple of Hindu

municipal corporators, trying to keep 'katal ki raat' off the streets of, for instance, Poona. It would be reasonable to assume that 'katal' would follow, especially if the justification for the ban was the assumption that the minority community was by nature rowdy and uncivilised.

The black response was to keep Carnival on the streets. Commander Patterson, who had made no secret of his opposition to the event taking place, was put in charge of the police bandobast. He assembled a force of 1,600 men, a few dozen buses, a helicopter for overall crowd control and alerted several police stations in the area. On Carnival day his men were stationed at the tube stations, in buses around street corners and in cordons of 40 around each steel-band parade. "It's a police Carnival" was the cry. Patterson proceeded, with task forces of 50, to arrest those who were making a bit of quick money by selling beer to the revellers. They had no liquor licences, and Patterson had no certificate for tact.

Several people were arrested, and a restaurant, famous in the area as a haven for blacks, was raided. On Monday the reply came loud and clear. From an epicentre where youths had set up their electronic systems and were playing to huge crowds, the riot spread over an area of four square miles.

There is no doubt now that pick-pockets, however organised, could not have put a few hundred policemen in hospital. The young West Indians moved as a community. They were together, they were being harassed and they weighed up the balance of forces and found them in their favour. They attacked.

Sixty blacks were arrested in the course of the four-hour battle. Only a handful of them were charged with picking pockets; the rest, with assault and affray. The list of the arrested shows that they came from far afield: Leeds, Birmingham, Leicester. They saved the West Indian community from humiliation at the hands of the police, and as such are not seen by the black community as the hooligans who caused the trouble, but as defenders against the declared enemy.

Notting Hill will happen again. Just as the demands of the rebels of Soweto are difficult to encapsulate in a series of slogans, so the disaffection and direction of the young British black cannot be described as a reaction against a



raw deal. They do not fight the police out of frustration, or at least not out of some immediate frustration. Today they can only be described as a section of the working class which finds itself unwilling to walk Britain's meritocratic treadmill of school, humble work and dole queue. Their failure rate in school is shocking because they do not care. Their unemployment rate is three times as high as that of the rest of the population because they will not take the jobs, such as bus conducting and hospital portering, which they are expected, by and large, to do. Through their continuous rebellion they have brought

funds into the black community — large doses of money given to government and semi-government agencies which promise to tame them, discipline them and send them to earn a wage. They do not want these second-hand funds. If they have a perspective, it is a re-apportioning of the wealth of the country between the employed and unemployed, a revolution in the way work and wage are apportioned in this society, an overhaul of the institutions which grade British labour; it is a direct accountability of the forces of law and order to the communities they control.

## REVIEWS

### *A Tax to End All Taxes*

D T Lakdawala

**Disparity Tax in a Composite Economy** by Gautam Mathur; The Macmillan Company of India, 1975; pp xi + 262; Rs 50.

THIS book presents the results of a study aimed at devising a system of taxation best suited to the requirements of a developing country aiming at rapid economic development with social justice within a democratic framework. It, however, inevitably gets permeated with the author's ideas on Heavy Investment Strategy demanding almost the entire output of heavy industry to go back into the sector and permitting all other sectors only a minimum of scarce resources essential to provide the necessities of life. An idealistic picture of a world egalitarian society (pp 5-8) providing equal access of all the countries to scarce world resources and equal living standards all over has also been drawn. Both these ideas (and many similar others) are likely to give rise to strong differences. They would be very important in a different context but can be usefully avoided if we stick to the fiscal aspect, which is the main theme of this book. We have tried this difficult disentanglement here, and concentrated on the fiscal angle.

Mathur shares the belief with many other developmental economists that the State need levy no taxes or indulge in public borrowing for revenue purposes, which can better be fulfilled by deficit financing. The inflationary impact, if any, follows from the nature of public expenditure, not from the

ways of financing it. Every type of public expenditure or investment is not inflationary *per se*: some types are inflation-creating and others are inflation-dampening, and an optimum investment strategy must ensure that a Balanced Allocation Ratio is maintained between them. If this is not guaranteed, the fact that tax revenues are raised sufficiently to meet the entire expenditure will not ensure that inflation does not follow; if it is maintained, deficit financing will have no price consequences. Deficit financing will have an advantage over both taxation and borrowing insofar as it will not cut off inflation-dampening investment through reducing post-tax incomes, increasing prices of luxuries or raising the rate of interest. Borrowing also brings in its turn interest liabilities which may threaten inflationary consequences later. The dictates of rapid development demand that misconsumption should be reduced and the right type of investment should be increased. The proper function of taxation is to play this allocative role. Traditional taxes on income, wealth estate or commodities are ill-designed to play this role. Borrowing is necessary only when the rate of interest is to be increased.

#### INCOME VS EXPENDITURE

Following Kaldor, Mathur regards a tax on income (except where meant as an anti-concentration device) as un-

desirable. Income measures one's contribution to society and is something which should be maximised, not something which should be discouraged. Income tax is a penalty on income. What should be discouraged is personal expenditure or consumption. Unlike an income tax, a tax on personal expenditure can be progressively progressive. The rate can exceed 100 per cent so that the disincentive to consumption would be powerful. Mathur also goes with Kaldor in his residuary method of ascertaining personal expenditure. He differs, however, in advocating different weights for different items and sub-items of receipts and payments. A disapproval index is suggested for differentiating among different types of income according to form of business organisation, type of goods produced and technique used, scale of production and kind of effort made. Different types of investment, which are deducted from receipts to arrive at notional consumption, are assigned different Encouragement Factors according to the degree of their desirability. Business expenditure being deductible is weighted low if it is undesirable — e.g., advertisement expenditure is given low weight. The tax so devised — Disparity Tax — will have the advantage that tax planning cannot reduce tax liability without enhancing social benefits through preventing misconsumption, misinvestment, etc. Its administration will require a Firm State with disciplined administration and no political interference in day-to-day administration, but it will not need a Hard State which rules by fiat and requires a great degree of regimentation. Under the Firm State most of the direction of economic activity will come through inducements and disincentives exercised through the market mechanism. Differential monetary interest rates will be used, but little of detailed controls so that there will be no widespread resort to law-breaking.

There is always a danger that with heavy rates of taxation, there may be greater incentives for evasion. Schedule C at the end of the book giving disparity tax rates contemplates the highest marginal tax on notional consumption at 1200 per cent. Mathur somehow seems to think that his scheme is so framed that the scope for evasion is drastically reduced. To an outsider this point is difficult to grasp. The likelihood of understatement of income seems as great as now. Cross-checking can be applied to transactions



between taxable units only. It would be interesting for an accountant to prepare the type of return needed from a firm to satisfy the requirements of the taxing authority according to schedules A and B, and discuss the sins of commission and omission it could give rise to. This is, however, a time-consuming exercise and we must rest content with pointing out a few loopholes. The broad type of business may not be difficult to ascertain, but business expenditure can easily lend itself to misclassifications if sharp tax differentials are laid down. The lines between basic wages and salaries on the one hand and non-basic rewards, between essential and essential amenities, between organising unproductive, speculative or gambling activities, etc, and otherwise, and between price rises due to cost increases and tax rises are not very clear-cut, and become more obscure as tax rates become heavier. It is basic to Mathur's scheme that these lines are sharply drawn.

While Mathur's fiscal policy is conceived on a grand scale, it is not worked out in detail. Original proposals have always the disadvantage that they cannot draw entirely on the lessons of past experience. But this makes it all the more incumbent that the limited experience available should be very carefully harnessed and analysed. As the author recognises, some of his ideas like discouraging certain forms of business expenditure, differentiating among different sources of income, etc, have been tried for some time; the personal expenditure tax was introduced and abolished twice. He would have done well to draw on the experience acquired and the difficulties met with in their administration. The history of excises bristles with the complexities of discriminating according to the size of business. There are many illustrations in excise and sales taxation of complications in taxing products of a multi-product firm at different rates.

#### MARKET VS CONTROLS

A greater problem is that in quite a large number of cases like scale, techniques, etc, the contours are so changing that there is no single person or authority likely to have all the detailed knowledge or information necessary to get the right answer. The market mechanism is a method to harness the scattered knowledge and information to a common purpose. Mathur has no respect for its judgments, but wants to maintain it to keep up the illusion of

free choice. It is very difficult to say how far it can function satisfactorily in this manner. There is always a fear that at some point it will break down even if one assumes that the correct answers are known; the working of the market forces including their response to new taxes has to be exactly grasped to arrive at appropriate tax rates (or differences) which will ensure that the two coincide. It is here that fiat score.

#### IRRELEVANCE OF REVENUE

Mathur takes the extreme stand that the amount of tax revenue gathered has no impact on misconsumption or misinvestment, and that all its effects are confined to necessary consumption or productive investment. While it may be agreed that high, even progressive, direct taxes (not confiscatory in nature) properly assessed and paid may not affect the consumption of the uppermost income groups, the middle groups will certainly reduce their luxury consumption. Even high commodity taxes have been observed to produce this effect. An analysis of fiscal systems has revealed that a substantial part is intended to transfer consumption over time for the poor groups or redistribute from the more fortunate to the less fortunate. Is there a felt need for some transfer from private to social consumption or from the present to the future, even for the lowest groups? To take

a simple example, is a compulsory provident fund or compulsory insurance for the humblest justifiable? Mathur's categories do not permit this question to be raised.

Mathur errs in assuming that problems of consumption can be entirely divorced from those of income, and that we can successfully strive for consumption equality without income or wealth equality. A system of private ownership of means of production cannot work without also providing for misconsumption and misinvestment except for a brief emergency. One may yearn for a revival of puritanic capitalism, but the institution was not created by external compulsions and the present climate makes its natural rebirth and survival unlikely. One can at least claim for socialism that it makes an honest effort at accumulation through controlling incomes at the source and that it is likely, because of its new radical institutional set-up, to initiate a new climate of incentives and motives.

Mathur's book will, however, have done a great service if it compels fiscal and monetary policies and detailed controls to be looked upon as one whole to fulfill the purpose of planned development. We have today so many departures from this salutary principle that its reiteration can serve only a valuable purpose.

## National Movement: New Light on a Landmark

C S

**New Light on Punjab Disturbances in 1919** edited with an introduction by V N Datta; Indian Institute of Advanced Study, Simla; 2 vols; pp 1155; Rs 200.

THE year 1919 can be seen as an important divide in the history of the Indian national movement. With the termination of the first world war, the attention of politically conscious Indians was centred on the fulfilment of at least part of the promise contained in Montagu's famous August Declaration. British Indian rulers, on the other hand, were more concerned with the acute economic unrest that had gathered momentum during the war and was far from receding. They were also harried by the thought that the

revolutionary terrorists might continue their efforts to achieve the country's independence; and that they might receive increasing encouragement and help from outside India, particularly from Russia and Afghanistan. Consequently, true to their characteristic twin policy of reform and repression, the rulers decided to retain in peace time the extraordinary powers they had armed themselves with during the emergency of the war. Of course the intention to grant new political reforms was not abandoned. The repres-



sion part of the policy was actualised in the form of the Rowlatt Acts. There were widespread protests in the wake of these Acts. The occasion threw up a leader who organised into some kind of a unified and purposeful agitation the localised outbursts of widespread discontent.

Though the leadership was in the hands of Gandhi and the anti-Rowlatt hartals and satyagraha were intended to be non-violent, violence broke out in many cities and towns. Already, psychologically, at the end of their tether, the rulers could not always maintain their composure while dealing with the situation. The worst case of deviation from controlled use of violence was, indeed, provided by the carnage that immortalised Jallianwala Bagh in the history of modern times.

Not much work has been done on this very significant phase of modern Indian history; and most of what has been done betrays a partisan spirit. For example, Rupert Furneaux's "Massacre at Amritsar" and Arthur Swinson's "Six Minutes to Sunset" are primarily concerned with defending Dyer. This is not to suggest that a defence of Dyer would, from a historical point of view, necessarily be partisan. What makes the two works partisan is the kind of defence they provide, as also the stretching to which available evidence is subjected by them. A consciously objective and fairly reliable account of Jallianwala Bagh was given by V N Datta in his monograph on the subject. But Datta had an advantage. He had been able to go through two crucial volumes of evidence relating to the Punjab disturbances in 1919. These volumes had been withheld from publication because of political and strategic considerations.

But there is no substitute for first-hand perusal of source material. Datta's "Jallianwala Bagh" suggested the possibilities of a better and deeper understanding of what happened in Punjab in 1919. The material which had enabled him to acquire such understanding of the subject had, however, remained virtually inaccessible. With the help of the Indian Institute of Advanced Study, he has now made it possible for anyone interested in the events of 1919 to consult this veritable mine of historical material.

What is this valuable material? It

consists of the VI and VII volumes of the evidence given before the Disorders Inquiry or Hunter Committee. That the whole of this evidence, unlike the evidence published in the other five volumes, was given in camera would in itself be an indication of the crucial and sensitive nature of the disclosures made therein. Added to this is the fact that these volumes contain the evidence of the Government of India, the Punjab Government, Sir Michael O'Dwyer, the Lieutenant Governor of Punjab, J P Thompson, chief secretary to the Punjab Government, Gen Hudson, the Adjutant-General of India, and of Malik Hayat Khan, a friend of O'Dwyer and one who had liberally promoted the cause of repressive recruitment during the war. The volumes also contain a number of statements and appendices.

#### ROLE OF ARYA SAMAJ

These volumes are important not only for reconstructing the political history of the period. They contain some precious material on the social history of contemporary Punjab. The pervasive role of the Arya Samaj, for example, emerges with remarkable sharpness in some of the evidence. There are also descriptions of the position of social groups and elites in contemporary Punjab.

But the chief value of the volumes is undoubtedly in terms of the disturbances that overtook the country in 1919. Interestingly enough, the authorities had for long been used to looking upon Punjab as a loyal province. That it was this loyal province that provided the maximum violent outbursts — there were non-violent outbursts too — in regard to the Rowlatt Acts was doubly surprising. Apart from its loyal antecedents, Punjab had since its annexation been ruled by firm and strong hands, and as such the people there were least expected to resist the tenor of rule that the Rowlatt Acts stood for. Why the reverse of what was expected occurred is amply explained by the two volumes. The introduction by Datta discusses this problem fairly convincingly. The figures for the collection of income and other taxes or for the recruits furnished by this 'martial' province, when contrasted with similar figures for the rest of the country, possess their own

eloquence and can be seen in these volumes.

What the volumes do more than anything else is to present in minute detail the political situation in the India of 1919. This is important. For it was in this perception of the situation that the possible ways of dealing with it — including possible aberrations like the one at Jallianwala Bagh — were rooted. British officials in India being almost obsessed with the fear of a rebellion, they could hardly view as altogether fortuitous and unconnected the simultaneous eruption of violence in so many parts of the country. Volumes VI and VII reveal how seriously the officials were thinking in terms of a conspiracy to throw the British out of India; a conspiracy that was not only India-wide but had international connections.

The value of this evidence lies not in telling us about such a conspiracy. Dyer had, in his evidence before the Hunter Committee, emphasised the existence of a conspiracy; and his evidence is known. The value of this evidence lies in making it impossible for historians to dismiss out of hand the idea of conspiracy even if they do not believe it. By implication the evidence should facilitate a better understanding of Dyer's reactions and reflexes in the midst of a crisis which induced him to believe — no matter whether rightly or wrongly from the point of view of those who are blessed with hindsight — that upon his action that fateful day depended the fate of Punjab.

But if one individual who was by no means a bloodthirsty monster reacted to the challenge before him with apparent savagery, how could the system as a whole act with great restraint in the face of what seemed to its agents a critical situation? The pragmatism underlying British policy in India may be seriously examined by scholars interested in the possibilities of violence both as a means of governance and of resistance.

Apart from making easily accessible such massive, valuable and fascinating material, Datta has also written a fine introduction about the history, contents and significance of these volumes. A wide variety of scholars will find the volumes interesting and useful.



# Social Organisation in Japan and Australia

## Some Thoughts on Comparative Social Mobility

William H Newell

*Social mobility cannot be studied separately from social stratification; and the pivot of social stratification system in industrial societies is the occupational system.*

*But despite being a highly industrialised country, the stratification of Japanese society presents some peculiarities which cannot be explained entirely in terms of class, determined by birth and educational qualifications, as understood in many Western societies.*

*In Japan, within the vertical organisation of an institution — say the government, industry, academic institutions, etc — there are horizontal classifications which are determined not by status, but by the jobs held. Social mobility in Japan is invariably within these horizontal classifications.*

DURING the last year I have been fortunate enough to have had the opportunity of attending seminars and reading through papers by F Lancaster Jones, (1976) Kenichi Tominaga (1973) and Saburo Yasuda, (1964) dealing with social mobility in three societies, Australia, the US (Chicago), and Japan.<sup>1</sup> As is generally accepted by most sociologists, social mobility cannot be studied separately from social stratification; and as Jones points out, "Students of social stratification are near-unanimous that the pivot of the social stratification system in industrial societies is the occupational system". Following this reasoning, the population of the three countries concerned are first of all divided into those belonging to the work force and those who are not. Those persons belonging to the work force are then divided into various occupations sometimes classified by their status (such as officials in the Japanese system) but more commonly by their specialised activity. Associated occupation in this sense are then collected together into groups. In the case of Jones's study there are 9 groups which he reorganises into 8 — professional, managerial, white collar, sales (non-manual), skilled, semi-skilled, unskilled (manual), and farm — to conform to Japanese categories. As Jones points out, "What is feasible is largely determined by the kinds of data available for both (Australia and Japan) at the national level".

Tominaga makes a similar point as it applies to the cities of Chicago and Tokyo. As a Japanese he is aware that the occupational categories (in the

respective censuses) are derived from the job classification and not from the social status classification. Tominaga says (1973:11), "If a particular instance of mobility is job mobility but not status mobility it is not vertical social mobility". This point is emphasised by the fact that of the 8 group occupational categories in Chicago and Tokyo, in Chicago position 6 is termed sales and position 8 service, whereas these two positions are reversed as far as Tokyo is concerned. Thus what we really have in these two studies is movement between groups of census categories. Whether these census categories can be regarded as stratified groups remains to be proved although Jones certainly regards them as some form of "class" although the means of class identification remains open and variable between different societies. This class identification may be based on forms of deference and hierarchy, on inequality of income or of inequality of educational opportunity or on other criteria. This depends on the society. But Jones tends to regard which of these forms becomes the outward symbol of social stratification to be not very important as each one is connected with the occupational structure. Since he rejects any small-scale study as being useless (because he states we do not know just what its relationship is to the overall structure) he believes one is driven back to census material, as the most suitable comprehensive empirical material.

Some of the conclusions Jones comes to are of great interest. Perhaps the two of most importance are the

high overall amounts of occupational mobility (which were almost the same for Japan and Australia in 1965), and the importance of educational level in obtaining a first job in both Japan and Australia. In this latter case, Jones (and Tominaga also) claim that the "effect of educational attainment on career beginnings and career mobility is less in Japan than Australia".

But what exactly is meant by this? Using Jones's figures for the mid-1960s only 19.5 per cent of boys aged 17 were still at school in Australia at that age whereas 56.3 per cent were at school in Japan. In 1972, 85 per cent of Japanese children sought schooling beyond the level of compulsory education at the end of junior high school. Senior high schools commence at age 15.<sup>2</sup> Where everyone is a chief there are no slaves. Where everyone has a university education, then the distinction between those of the same age depends on the university from which one has graduated or class of degree rather than the level (that is year) which one has attained. In fact we know that in Japan you may be "over-educated" by continuing post-graduate education, thus enrolling at least a year later for positions in the private or national bureaucracies, a substantial disadvantage. This position is being modified for private industry where an increasing number of graduates are being recruited. We also know that the universities are not equally ranked but are graded in a skewed order so that important firms will only request graduates from important universities. What counts is not so much whether you have a graduate



degree in engineering but from where you received it. The usual parallel is with a row of organ pipes of different heights, each with a limited number of graduates available only to the bottom of the pipes, and each firm also extending vertically to different heights but with little movement between them. Although a hundred years ago there seemed to be numerous categories which could make the grade at the bottom of the pyramidal bureaucratic hierarchy (*kogai, detchi, tedai*, etc) today these grades are reduced to three, *koin, shokuin* and administrators. Each non-interchangeable category is recruited from junior high school graduates, high school graduates and university graduates. What is most interesting is not the speed with which one moves within Jones's census categories but the extent to which one is able to move from one of these status grades to the one above. Within a firm this is almost impossible in Japan.

Moreover, the main difference between Australian and Japanese society is that in the former, an employee can zigzag between any firms if he has the qualifications, but in Japan since the firms are arranged in order an administrator can usually be mobile only by moving from a higher firm to a lower firm although one may obtain a higher rank in a lower firm. But one cannot move from a lower firm to a higher firm. This distinction cannot come out at all in the types of figures produced by Jones and Tominaga because the horizontal classifications are classifications of jobs and not of status, and status in Japanese society at least is determined within the local vertical organisation to which one is usually admitted at the bottom of one of the three main educationally determined groups of which the majority of firms are composed.

Let us look at the Japanese society in more detail. First of all, institutions under the dual economy system are divided into those which have a small membership and little power to control their sales, and those which have a large membership and power, either alone or in combination with other similar institutions, to control their market to some extent. Traditionally, in manufacturing, larger firms are defined by the Economic Planning

Agency as having over 50 million yen capital or employing more than 300 regular employees. Since the power of the small enterprises is now becoming weaker and forming an ever smaller section of the economy, I will confine my remarks to the second group.<sup>3</sup>

These institutions fall into various types; government departments, religious institutions, universities, private firms belonging to different manufacturing trades, etc. A group of organisations in one category is not ranked within another category. Each category is exclusive. Within each category, each institution can be graded in relation to all other institutions in that category although the criteria may be different. I have pointed out elsewhere (Newell 1971) that in the case of universities, it is the retiring age of professors; in the case of government departments it is often the increasing or decreasing amount of money which lies at the disposal of the department for disbursement (although there are alternative criteria such as the ritual ranking derived from the seating round the cabinet table or the degree of satisfaction of the administrative superiors in exercising bureaucratic power) (Newell 1975). In the case of business the ranking is more difficult and I will not try to categorise the criteria. I will merely state that the director at the top of a powerful business is regarded with much more respect than the director of a smaller business whose area of influence is smaller. A general occupational category — *administrative, managerial* — tells us nothing about *status*. Thus a higher status and the exercise of power either real or behind the scenes go hand-in-hand in Japanese society. But the status originates from *within* the columns of business themselves and not from the society at large. If I may simplify: as a Director of Mitsui Banking one can obtain influence in outside society, but the converse is not true. Just because you have importance in Japanese society at large, it would not follow that you could be welcomed as a director of Mitsui Banking. No firm would dream of inviting a former member of the nobility to be a director just because of his title.<sup>4</sup> Most directors of Japanese businesses are executive directors with practically no one appointed from outside; in the

West, it is possible to make a full time job of becoming a director of several often unrelated companies at the same time.

It is from within the larger institutions that the ranking system is organised, especially with respect to main banking groups, security companies, government departments, established national undertakings and large linked groups of firms. Where one has linked groups of firms there is a degree of social mobility from higher ranking to lower ranking firms especially within a few years of retirement age but always from a more important to a less important institution or column. In many government departments the direction of mobility is protected by law. The Japanese External Trade Organisation officials are forbidden by law to become appointed to their parent organisation, the Ministry of International Trade. Thus there is a degree of horizontal mobility which increases at the top of the institutional pyramid but always from a more important to a less important institution or column. But occupation-wise this will not show on Jones's and Tominaga's statistics because this is status mobility and not occupational mobility, the status deriving not from the occupation but the ranking of the institution. Of course as the demand for more employees grows this change will be reflected to some extent in "structural mobility". But the key question is to what extent?

Let us now pass our attention from institutions to the individual. Again I would like to divide the individuals in Japanese society into two main groups; those who have a permanent position somewhere on the ladder of one of these institutions and those who do not. These latter may be divided up into three main groups: (a) those who have passed through the institutional system by retirement and whose power declines rapidly through ageing. Those who have formerly been labourers and retire at 50/55 are clearly different both occupationally and status-wise from those who have been managing directors of top companies and often have not even retired at 70, though both have this in common in that they are retired and their power decreases rapidly. (b) Those who will never pass through the powerful institutions but will attain only a temporary status for



shorter-than-life period by attachment. These consist today mostly of women, whether married or single and foreigners; (c) Those who have not yet entered one of these institutions but intend to do so. These are mostly males in the educational system.

In Japan the work force consisted of just over half the population in 1970. Up till recently there was an absolute shortage of workers in the manufacturing industry. If one wished to obtain a permanent position in one of these vertical institutions there was no special difficulty in doing so when there was a shortage of labour. Thus education cannot be regarded as a qualification in Japan to become a worker for everyone has this qualification. But (unlike in Australia) each additional year of employment reduces the chance of being able to change employment outside one's original institution.<sup>5</sup> In short, a firm at the top of the institutional category would prefer to employ a young person from school than to employ an older worker from another lower company. (In Australia in contrast, with two workers applying for the same job, other things being equal, the worker with the higher educational qualifications would be employed.) However if one entered a Japanese firm at the level of compulsory education at the present day one would *never* have the chance of being promoted to a powerful position in the firm (although one's wages might go up with age).

But if one wished to move to the top of the firm with increasing status one would need a university degree in a fairly appropriate subject. Over 99 per cent of new executives in large firms have degrees but the question is not so much whether one has a degree but rather as to where the degree is from. There are some 250 universities in Tokyo alone and all are graded by criteria that I mentioned earlier. Thus top firms or institutions choose top universities to recruit from and poor firms, poor universities; but the commencing salaries of all graduates in all firms only varies within pretty small limits. But if one sticks to one's institution and if the institution to which one has entered is a good one, some reward in terms of power and status is almost certain as one grows older. The "column" which one enters is

thus largely determined by the university which one enters.<sup>6</sup> It is thus not surprising that Tokyo University, as the most prestigious university, has now about 65 per cent of its first year candidates *ronin*, that is, students who have had more than one attempt to pass the entrance examinations. The poorer the university the greater the number of entrance candidates who are likely to be successful at the first attempt. Thus there is a link between the rank of the university and the rank of the firm to which one is admitted. It may be noted that a student, say of economics, is not competing with all other students who have completed economics but only with those who have completed economics in the same university going for the same job at the same year.

Thus social mobility in the sense of comparing an individual's status with that of his father at the same period in the life cycle (or alternatively comparing what an individual is likely to be with the major status which his father held) implies that similar statuses such as clerical or professional or administrative can be compared with each other. In a society such as Australia or certain Western countries with a very strong class system this may well be the case. A child who has an upper class father has much more chance of entering the same class than a lower class child has of entering a higher class. The link between generations is made partly through the education system. But in Japan it seems doubtful whether we can talk about a class system in the same sense. All members of a firm dress very similarly, dialect differences depend on area from which one comes, not from the schools from which one graduates, etc. The most prestigious universities have the most competitive entrance examinations and, until recently had the highest proportion of clever students from the most rural and poor areas and the difference in monetary rewards between those at the top and at the bottom of the social system, as evidenced by published income tax returns, was certainly much less than in most other industrialised societies.

But in terms of institutions there are certainly marked class divisions. The large multinational and national corporations with incomes larger than

the incomes of many small countries are as removed from the small businesses of a few backshop workmen as they can possibly be. But for various reasons, cultural and sociological, once one has entered one of these groups it is as a member of this group that one identifies oneself rather than as an individual moving from one firm to another as one's opportunities present themselves. Although in terms of *occupation*, Tominaga and Jones have clearly shown that the rate of social mobility was not dissimilar between Japan and Australia in 1965, the rate at which one moves *jobs* was then only just over 1 for 30 year olds in Japan, whereas it was nearer 4 in the case of Australia. That it is the group which is today the most important determinant of status can be illustrated from the nature of wage bargaining in private Japanese businesses. The local trade union, usually company based and consisting of all the permanent non-executive staff, usually has access to the company accounts to see how much the company can afford to pay in wages. It argues in a way from *within* the company in contrast to a western trade union where it argues from outside on general arguments, increase of cost of living, general profits of industry, etc.<sup>7</sup> The employees are members of the company with lifetime interests superior to outsiders such as shareholders. Those who are most deprived in the Japanese society are *not* the permanent workers but those who are either not full members of institutions or those who depend on society in general for their welfare, such as pensioners and the aged. And this is the section which is mostly unorganised in the sense of not being trade union members because they are temporary, or who are severely hit by inflation or illness or age. These groups are naturally excluded from Jones's and Tominaga's study as they are not considered part of the work force and do not take a direct part in the productive process. Thus the direct comparison between Australia and Japan using census statistics give a false impression of the degree to which individual Japanese are actually free within the industrial system, because occupation and status are not sufficiently closely connected in Japanese society to form a really sound basis for



comparison between the two countries. This is not to say however that *within* Japanese society or *within* Australian society, over a period of time, using the same criterion, important conclusions about the size and behaviour of certain occupations do not produce valuable indicators of the state of the society and economy. But as comparative indices they are not sufficiently subtle.<sup>8</sup>

If one were to compare Australia and Japan the main structural distinction is undoubtedly the Japanese institutional ranking system. Both countries have bureaucratic organisations which have a continuity in the social structure apart from the members who make them up. But as an Australian individual becomes older and wends his way to retirement numerous criteria beg for his attention, like salary, retirement allowances, desire to wield power over his fellows, the permanence of his ties with other suburbanites where he lives, etc. And he will move from one job to another depending on where he will maximise all his various interests. In Japan, such choices to the worker or administrator are

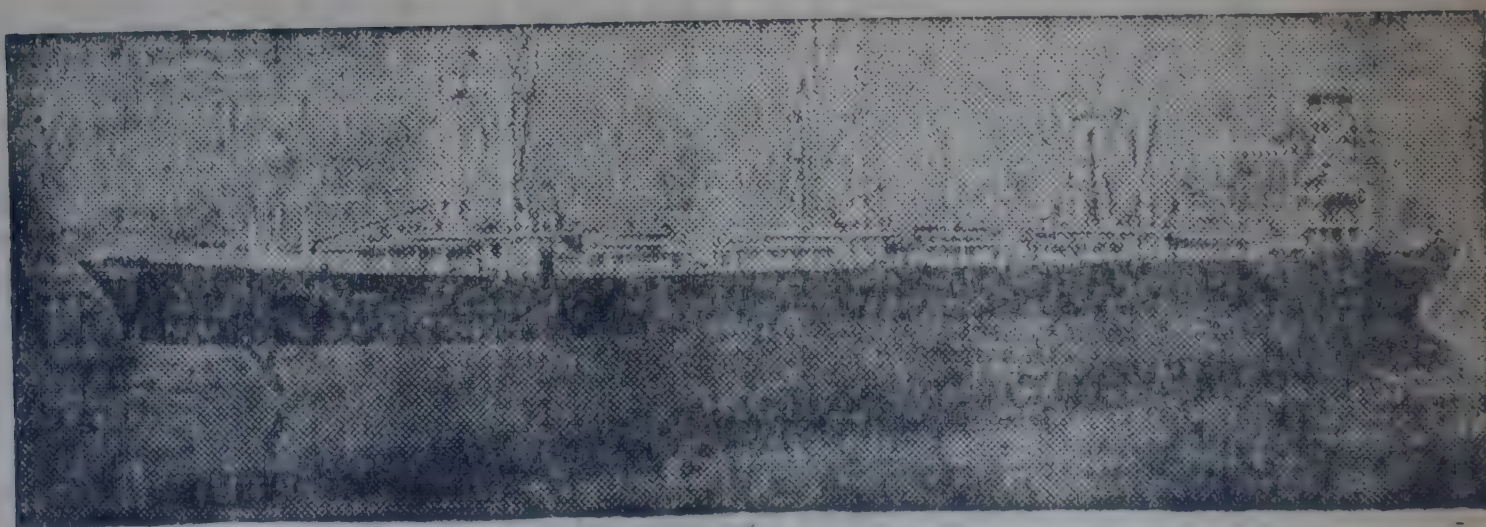
less open because they can take place only within his firm or within a neighbouring one of lower rank. As he moves up within his firm, it becomes more and more difficult to change one's path through life. It is interesting to note that some recent studies have been carried out in Japan by the Institute for Occupational Research as to the degree of "lifetime commitment" shown by various categories of industrial workers. This has shown that older workers who have remained with the firm for many years are much more committed to the firm's ideal than the newly employed or younger workers and executives. Even when such older workers are put on to rather dull jobs with younger workers with better education instructing them, this does not affect their loyalty. In a study carried out by Dore on whether one would object to having a younger man made foreman over an older one, the Japanese showed much less objection to such a practice than the English would, in a similar case.<sup>9</sup> This is because with a fixed status one does not feel one's status threatened by a younger man

however capable he might be. It is your fellow graduates who are your competitors.

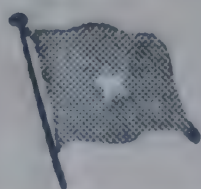
The direct comparison between the Australian and Japanese occupational structure cannot be more than an indication for further research unless the institutional structure of the two societies is also taken into consideration.

### Notes

- 1 Drysdale and Kitaoji's study. Jones's article is not yet available; The book should be published in 1976.
- 2 In 1970 78 per cent of boys of 16, 17 and 18 years and 78 per cent of girls at 16, 17, and 18 years of age were at High School. 24.9 per cent of men (19-22 years) and 15.5 per cent of women (19-22 years) were in tertiary institutions although of the women, 10 per cent of the total number between the ages of 19 and 20 were at junior colleges. In 1950 only 0.5 per cent of women (19-22) were in tertiary institutions. In 1972, of a total population of 10,901,000 in the 20-24 year group, 1,530,000 were enrolled in universities.
- 3 This is a recent tendency, as shown by the figures of the last few years, weakening the tradi-



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tional economic approach to the study of the Japanese economy as consisting of two different types of productive enterprises.

4 An interesting example of this is that when the former sections of the Mitsui *zaibatsu* were reconstituted after the Americans left none of the members of the former family holding company of central Mitsui were invited back to any of the former subordinate companies' boards of directors. The highest Mitsui family member is in charge of a kindergarten for the Mitsui families' children and in a recent interview he stated how much more he preferred his present life.

5 Most permanent employees are entitled to a retirement bonus which is calculated differently whether one retires oneself or retires at the request of the company. It also increases rapidly with years of service. It is not unlike the New South Wales State Employees' Superannuation Scheme.

6 Some universities have High Schools, graduates of whom are admitted without examinations to the university thus building a mini-educational column of greater depth.

7 I am not arguing however that the interests of the company and the union are the same. Bitter union/company disputes do break out periodically.

8 As Tominaga points out, if one uses only 3 levels — non-manual, manual and farm — then international comparison becomes possible as these 3 levels are found in the US and Japan (although not in Australia) but "this coarse categorisation is insufficient for detailed analysis".

9 R Dore in "British factory-Japanese factory" (Allen and Unwin, 1973) makes the distinction by claiming that while English Electric had a "class system", Hitachi in Japan had a "status pyramid" (p 263). Dore also suggests, on the basis of a questionnaire administered in both English and Japanese, that Japanese workers care less than British workers whether a younger person with ability is telling an older worker how to go about his business.

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# Agriculture and Non-Agriculture in Institutional Credit

## A Note

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S L SHETTY's interesting paper<sup>1</sup> shows that by June 1974 the share of agriculture in outstanding credit for commodity sectors had risen to 34.2 per cent. Agriculture's share in gross commodity output was 45.6 per cent (p 699) in 1972-73. Assuming that this also applied in 1974-75, the ratio between non-agricultural and agricultural credit per unit of gross output is surprisingly small, viz, 1.6:1

$$(i.e., \left( \frac{100-34.2}{100-45.6} \div \frac{34.2}{45.6} \right) )$$

Assuming that "after making allowance for [other considerations], over a period of time [a sector's] share of credit ought not to be disproportionately larger than the share in the [gross] value of output" (p 696), Shetty concludes that "these differential shares in credit and output cannot be considered high, considering the nature of agricultural operations in India" (p 699).

However, Shetty's procedure seriously understates the inadequacy of agriculture's share in credit. He considers only credit per unit of gross output, i.e., output including all current input costs. However, his reasoning is that access to institutional credit is a scarce resource (and an inflator of cash demand) that ought to be rationed among sectors — *prima facie* in accordance with their contribution to "gross national product or some other variant of it in real terms" (p 696). Now this sensible guideline, of course, refers to national product gross of depreciation, but *net* of the (much larger) cost of current inputs. GNP figures do not seem to be available by sectors for India, but Shetty cites NDP<sup>2</sup> data for 1973-74 showing that "agriculture and allied activities" contributed 51.9 per cent of NDP

in 1973-74, while "commodity industry" (mining and quarrying, manufacturing and electricity) contributed 18.3 per cent (p 698). Since in June 1974 the comparative shares of the two sectors in outstanding institutional credit were 34.2 per cent and 65.8 per cent respectively (p 699), this means that "commodity industry" was enjoying about 5.4 times as much credit per unit of NDP as agriculture

$$\left( \frac{65.8}{18.3} \div \frac{34.2}{51.1} \right). \text{ This ratio of}$$

5.4 to 1, based on Shetty's figures, much more accurately reflects the disparity between "commodity industry" and agriculture, in access to institutional credit, than does the ratio of 1.6 to 1 implicit in his paper.

It might be objected that the ratio between the credit advanced to any two sectors should, in the long run, be close to the ratio of their outputs gross of all raw-material purchases (not just of depreciation), because these purchases are part of the cash that a sector's firms have to find in order to produce. That criterion would have three drawbacks. First, unless all sectors showed similar ratios between output gross of raw-material purchases and *net* output in the normal national-income sense,<sup>3</sup> the criterion would be incompatible with Shetty's sensible proposal to allocate credit roughly in proportion to national income (contribution to output and/or to monetary demand). Second, the gross output criterion creates the absurd situation that two sectors such as tractors and tyres would reduce (increase) their credit "entitlement" by vertical integration (disintegration) between them. Above all, the criterion fails to allow for one essential difference between the credit requirements



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of agriculture and "commodity industry": that the latter has a relatively smooth flow of purchases of inputs and sales of outputs over the year, whereas agriculturists systematically require to buy inputs, and to commit themselves to payment, several months before their products are harvested.

This latter feature not only renders it quite inappropriate to view the (much larger) ratio of inputs to outputs in "commodity industry" than in agriculture as justifying a larger ratio of credit to net product (as the above criterion does); it suggests also that even the criterion "same ratio of credit to NNP in each sector" is too kind to commodity industry. This has not only the great advantage, as regards credit, of needing less per unit of output than agriculture because both input and output flows are smoother over the year. Commodity industry is also, on average, organised in larger units, with more access to internal savings and to the private capital market. It is also less liable to the draining of production credit towards the (usually necessary) funding of slack-season family consumption. And, unlike agriculture, it seldom turns credit-financed inputs into 'subsistence' products, which are consumed by the family that owns the firm, and which thus — however efficiently produced — do little (albeit something) to help repay trade credit. Thus even a 5.4 to 1 ratio between non-"commodity-industrial" and agricultural institutional credit, relative to NDP, may understate the disparity relative to the requirements of efficient production.

Perhaps even more important, the public sector looms large in the ownership of Indian "commodity industry", but is insignificant as an agricultural owner or operator. It is not clear how deficits in, or government grants to, publicly-owned enterprises were dealt with in Shetty's calculations; but it seems likely that he has excluded some of these large sums from the ambit of "institutional credit", partly because they cannot really be regarded as loans, partly because the data sources are quite different. If they are excluded, then "commodity industry" — by virtue of government subventions — has a far smaller requirement of credit, per unit of output either gross or net of inputs, than has agriculture. It would be more appropriate, perhaps, to

compare private credit/output ratios between the sectors.

One final point. Shetty rightly points out that in June 1974 "the weighted average of the interest rate [s] on commercial bank credit as direct finance to agriculture worked out to 10.8 per cent, as compared to 11.3 per cent for industry", and that "co-operative credit for agriculture also carries relatively lower rates of interest" (p 699). I suspect that the average length of the term, for which credit is borrowed, is much lower for agriculture and that the security — land or crop — may well be better. If term and security are held constant, agricultural borrowing from institutions could well be dearer than borrowing by "commodity industry".<sup>4</sup> Certainly it is much less ample, relatively to the significant available indicators; even to say "at least five times less ample", on the above reasoning, would seem to be an understatement.

### Notes

- 1 S L Shetty, 'Deployment of Commercial Bank and Other Institutional Credit: A Note on

Structural Changes', EPW, May 8, 1976.

- 2 How, in India, does the ratio between GNP in agriculture and "commodity industry" (the ratio that Shetty regards as the main determinant of their proper long-run shares in credit) compare with the ratio between the two sectors' NDP (which is all that the data give)? Probably the ratios are quite close. As a proportion of its NDP the addition of depreciation will boost agriculture's GNP figure less than commodity industry's; but the deduction of net factor payments to non-Indian nationals will reduce agriculture's GNP figure proportionately less than commodity industry's.
- 3 This is clearly not the case. For Indian agriculture and "commodity industry" respectively in 1972-73, the ratios were, respectively, 1.3 and 4.5 (Shetty, pp 698-9).
- 4 It is no part of my argument that subsidised credit, in any sector, is likely to be efficient or equitable. Given the structure of power, it is much more likely to enable bigger operators to finance sub-marginal activities, at private profit but at social loss. As against such policies, Shetty is right to advocate (p 701) "redistribution of existing institutional credit in favour of the small and marginal farmers and landless labourers" and tenants.

### State Trading Corporation

THE State Trading Corporation accounted for nearly one-fifth of India's total exports in 1975-76. Its exports during the year were of the value of Rs 760 crores, showing a rise of 36 per cent over 1974-75. Exports of canalised items amounted to Rs 695 crores and of non-canalised items to Rs 65 crores. Among the canalised items sugar, semi-processed leather, cement, salt and opium made the major contributions to growth in exports. For the second consecutive year, sugar was the largest single foreign exchange earner for the country. The share of the canalised items in STC's total exports declined from 94 per cent in 1974-75 to 91 per cent in 1975-76. This reflects the efforts made to step up exports of non-canalised items.

STC's imports in 1975-76 were lower at Rs 217 crores compared to Rs 232 crores in the previous year. Lower international prices and improved indigenous availability of edible oils and chemicals contributed to the reduction in imports.

Despite the rise in total turnover from Rs 794.3 crores in 1974-75 to Rs

981 crores in 1975-76, STC's income showed a decline at Rs 19.7 crores compared to Rs 22.8 crores in the previous year. Costs, however, rose from Rs 4.2 crores to Rs 5.2 crores, leading to a decline in profit before tax from Rs 18.6 crores to Rs 14.5 crores, and in profit after tax from Rs 6.4 crores to Rs 5.7 crores. The ratio of profit before tax to sales declined from 2.4 per cent in 1974-75 to 1.5 per cent in 1975-76. A sum of Rs 3 crores out of profits for the year is proposed to be transferred to the Export Development Fund. With this, the total amount available in the Fund will be Rs 6 crores.

A unique feature of the STC's annual report is that it also presents the Corporation's budget for 1976-77. The budget envisages a decline in the Corporation's exports from Rs 760 crores to Rs 615 crores and its imports from Rs 217 crores to Rs 175 crores. The Corporation's total turnover is thus expected to decline by about 19 per cent in 1976-77 compared to a rise of 24 per cent in 1975-76. The expected decline in exports is due to lower exports of sugar at Rs 225 crores compared to Rs 249 crores in 1975-76.





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